

Form Approved OMB No. 2010-0019 Approval Expires 12-31-89



0006113490

90-890000563

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Comprehensive Assessment Information Rule

REPORTING FORM

When completed, send this form to:

Document Processing Center
Office of Toxic Substances, TS-790
U.S. Environmental Protection Agency
401 M Street, SW
Washington, DC 20460
Attention: CAIR Reporting Office

For Agency Use Only:
Date of Receipt:
Document Control Number:
Docket Number:

CAIR REPORTING FORM CHECKLIST

THIS CHECKLIST IS NOT REQUIRED TO BE SUBMITTED, IT IS FOR RESPONDENT'S INTERNAL USE ONLY

This form is intended to gather information on a specific listed substance that is manufactured, imported, or processed at one facility. Respondents must answer only those sections or specific questions required in the CAIR rule.

Respondents may use the same form each time they must report. The original copy of the form received by respondents should be kept on file and used to make copies of the questions required to be answered. These copies may then be circulated to those employees who will complete the form. Respondents must submit only one copy of each question rather than compiling parts of each question from various employees and submitting them together as one question.

Respondents need only supply information on the form that is "known to or reasonably ascertainable by" the respondent. Refer to the glossary for this definition. All reports with incomplete responses will be assessed as invalid and a Notice of Noncompliance Error Letter and a copy of the question will be sent to you for completion.

Before completing any portion of this form, please read the instruction booklet. The booklet contains general instructions on how to comply with the rule, supplemental instructions and sample answers for many questions, and a glossary containing definitions of key terms. Refer to the glossary whenever an unknown term appears to examine the definition provided.

If you cannot determine your reporting obligations, you should call the TSCA Assistance Office, U.S. EPA, at (202) 554-1404. To obtain additional forms, write to the TSCA Assistance Office (TS-779), ATTN: CAIR Form Request, Office of Toxic Substances, Environmental Protection Agency, Room E-543, 401 M St., SW, Washington, DC 20460, or call at (202) 554-1404.

BEFORE RETURNING YOUR COMPLETED CAIR FORM PLEASE CHECK THE FOLLOWING:

 _1.	Have you completed and included Section 1 for each form you are submitting?
 _2.	Have you submitted a standard chemical name and Chemical Abstract Service Registry Number for each chemical you are reporting on?
_3.	Does your submitted form include the original certification signatures as required for questions 1.06, 1.07, and 1.08?

•	
4.	Have you submitted a completed separate form for each substance you are required to report on?
5.	Have you submitted a completed separate form for each site at which you manufacture, import, or process a listed substance?
6.	For each listed substance you must report on, have you reported on all activities you engage in at each site using the listed substance on the same reporting form?
·7.	If you are claiming information as Confidential Business Information (CBI), have you completed the CBI substantiation form in Appendix II of the form for each category containing CBI? Failure to submit a completed CBI substantiation form with a reporting form containing CBI will result in the waiver of your claim of confidentiality.
8.	For each question that you are required to answer, have you responded by either providing the data, stating not applicable ("N/A"), or, if the question permits, stating unknown ("UK")?
9.	Have you right justified your responses to questions asked that require respondents to give a numeric response in a series of boxes (e.g., the answer "372" is entered as [0][0][3][7][2])?
10.	Have your responses been given in alpha, numeric or alpha-numeric form such as 3 million or 3,000,000? Responses must not be given in scientific notation such as 3×10^6 .
11.	If you needed additional space to report the required data, have you checked the continuation sheet box at the bottom of each page that requires additional space; attached additional copies of the specific questions of this form that contain additional information; and listed the attachments in Appendix I of the reporting form?

SECTION 1 GENERAL MANUFACTURER, IMPORTER, AND PROCESSOR INFORMATION

	4
PART A GENERAL REPORTING INFORMATION	
1.01 This Comprehensive Assessment Information Rule (CAIR)	Reporting Form has been
completed in response to the <u>Federal Register Notice</u>	of $[\overline{/}] \overline{2}] [\overline{2}] \overline{2}] [\overline{8}] \overline{8}]$ mo. \overline{day} \overline{year}
[_] a. If a Chemical Abstracts Service Number (CAS No.)	is provided in the <u>Federal</u>
Register, list the CAS No	012121417171-16121-131
b. If a chemical substance CAS No. is not provided in either (i) the chemical name, (ii) the mixture name the chemical substance as provided in the <u>Federal</u>	me, or (iii) the trade name of
(i) Chemical name as listed in the rule	N/A
(ii) Name of mixture as listed in the rule	NA
(iii) Trade name as listed in the rule	NA
c. If a chemical category is provided in the <u>Federal</u> the category as listed in the rule, the chemical reporting on which falls under the listed category substance you are reporting on which falls under	Register, report the name of substance CAS No. you are y, and the chemical name of the
Name of category as listed in the rule	N/R
CAS No. of chemical substance	
Name of chemical substance	
1.02 Identify your reporting status under CAIR by circling	the appropriate response(s).
CBI Manufacturer	
[] Importer	2
Processor	
X/P manufacturer reporting for customer who is a proce	essor 4
X/P processor reporting for customer who is a processor	or 5
[_] Mark (X) this box if you attach a continuation sheet.	

	Does the substance you are reporting on have an "x/p" designation associated with it in the above-listed Federal Register Notice?
CBI,	Yes
1_1	Nc [_] Go to question 1.05
1.04	a. Do you manufacture, import, or process the listed substance and distribute it
CRT	under a trade name(s) different than that listed in the <u>Federal Register</u> Notice? Circle the appropriate response.
<u>CBI</u>	Yes
	b. Check the appropriate box below:
	[] You have chosen to notify your customers of their reporting obligations
	Provide the trade name(s) N/A
•	[] You have chosen to report for your customers
	You have submitted the trade name(s) to EPA one day after the effective date of the rule in the <u>Federal Register</u> Notice under which you are reporting.
1.05 CBI	If you buy a trade name product and are reporting because you were notified of your reporting requirements by your trade name supplier, provide that trade name.
[]	Trade name
	Is the trade name product a mixture? Circle the appropriate response.
	Yes 1
	<u>No</u>)
1.06	Certification The person who is responsible for the completion of this form must sign the certification statement below:
<u>CBI</u>	"I hereby certify that, to the best of my knowledge and belief, all information entered on this form is complete and accurate."
	RONALD H JOHNSON KONSON KONSON 5/23/89 NAME SIGNATURE DATE SIGNED
	TECH DIRECTOR (601) 842 - 8311 TITLE TELEPHONE NO.
[_] 1	Mark (X) this box if you attach a continuation sheet.

1.07 CBI CDI CDI	with the required information or within the past 3 years, and this for the time period specified in are required to complete section now required but not previously submissions along with your Sect "I hereby certify that, to the be information which I have not income	you have provided EPA or another Form a CAIR Reporting Form for the list is information is current, accurated the rule, then sign the certificated of this CAIR form and provide a submitted. Provide a copy of anytion 1 submission. Dest of my knowledge and belief, all cluded in this CAIR Reporting Form and is current, accurate, and complete.	ederal agency ted substance t, and complete tion below. You ny information previous l required has been submitted
	NAME	SIGNATURE	DATE SIGNED
	TITLE	()	DATE OF PREVIOUS
		IBBITIONE NO.	SUBMISSION
CBI JA	"My company has taken measures t and it will continue to take the been, reasonably ascertainable b using legitimate means (other th a judicial or quasi-judicial pro information is not publicly avai	ments truthfully and accurately ap ch you have asserted. o protect the confidentiality of the se measures; the information is not by other persons (other than govern an discovery based on a showing of seeding) without my company's consulable elsewhere; and disclosure of my company's competitive position.	he information, t, and has not ment bodies) by special need in ent; the the information
	NAME	SIGNATURE	DATE SIGNED
	TITLE	()	

	B CORPORATE DATA
1.09	Facility Identification
<u>CBI</u>	Name [5]4]P]E]R]] 0]R]] P]R]0]D]4 C]T]5]] S]A]L]E]S]L]N]C Address []]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]
	[]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]
	[<u>m]5</u>] [3]8]8]6]2][]]] State
	Dun & Bradstreet Number
	Employer ID Number
1.10	Company Headquarters Identification
<u>CBI</u>	Name [S]U]P]E]R]Î]O]R]]P]R]O]D]U]C]T]S]]B]D]U]E]S]IN]C. Address []]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]
	[]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]
	State Zip Dun & Bradstreet Number
<u> </u>	Mark (X) this box if you attach a continuation sheet.

	Parent Company Identification \mathcal{N}/\mathcal{H}
CBI	Name [_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]
[_]	Address [_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]
	· [_1_1_1_1_1_1_1_1_1_1_1_1_1_1_1_1_1_1_1
	[_]_] [_]_]_]_][_]]_]_]_ State
	Dun & Bradstreet Number
1.12	Technical Contact
<u>CBI</u>	Name $[]]]]]]]]]]]]]]] [] R] O [N] A [L] d [] H] J [O] K [N] S [O] N $
[_]	Title [_]_]_]_]_]_]_]_]_]_]_]_]_]_]]]]]]]]]]
	Address [_]_]_]_]_]_]_]_]_]]]]]]]]]]]]]]]]]]]
ž -	[_]_]_]_]_]_]_]_]_]_]_]_]_] <u>]]]]]]]]]]]</u>
	[<u>n]</u>] [3] <u>8</u>] <u>8</u>] <u>6</u>][]]] State
	Telephone Number
1.13	This reporting year is from $[0]3]$ $[8]7$ to $[0]3$ $[8]8$ Mo. Year Mo. Year
•	

1.14	Facility Acquired If you purchased provide the following information about N/A	this facility during the reporting year, but the seller:
CBI	· // //	
[_]	Mailing Address [_]_]_]_]_]	_ _ _ _ _ _ _ _ _ _
	[_1_1_1_1_1_1	
		[_]_] [_]_]_]_]_][_]_]_]_] State
	Employer ID Number	[_1_1_1_1_1_1_]
	Date of Sale	[_]_] [_]_] [_]_] [_]_ Mo. Day Year
	Contact Person []]]]]]	
	Telephone Number	[_][]-[_]]-[_]]-[_]]]
	: v	
1.15	Facility Sold If you sold this factorial following information about the buyer N/ρ	cility during the reporting year, provide the
CBI	Name of Buyer [_]_]_]_]_]	
[_]] Mailing Address [_]_]_]_]_]_]	
		[_]_] [_]]]]]]]][_]_]_] State
	Employer ID Number	[_1_1_1_1_1_1_1_
	Date of Purchase	[_]_] [_]_] [_]_ Mo. Day Year
	Contact Person [_]_]_]_]_]_]_]	
	Telephone Number	[_]_]_]-[_][]-[_]]]]-[_][]]
[_]	Mark (X) this box if you attach a cont	tinuation sheet.
	-	

Classification	Quantity (kg/yr)
]	<u> </u>
Manufactured	• •
Imported	••
Processed include quantity repackaged)	1,470,188
Of that quantity manufactured or imported, report that quantity:	
In storage at the beginning of the reporting year	• •
For on-site use or processing	• •
For direct commercial distribution (including export)	• •
In storage at the end of the reporting year	• •
Of that quantity processed, report that quantity:	
In storage at the beginning of the reporting year	21,764
Processed as a reactant (chemical producer)	
Processed as a formulation component (mixture producer)	••
* Processed as an article component (article producer)	•
Repackaged (including export)	••
In storage at the end of the reporting year	37,579
	•

	Mixture If the listed subs or a component of a mixture, chemical. (If the mixture co each component chemical for a	provide the following info mposition is variable, rep	rmation for each component
<u> </u>	Component	Supplier Name	Average % Composition by Weight (specify precision, e.g., 45% ± 0.5%)
·			
			Total 100%
			\$

	SECTION 2 MANUFACTURER, IMPORTER, AND PROCESSOR VOLUME AND USE
2.01 <u>CBI</u>	State the total number of years, including the reporting year, that your facility has manufactured, imported, or processed the listed substance.
[_]	Number of years manufactured yrs.
	Number of years imported yrs.
	Number of years processed yrs.
2.02 CBI	State the quantity of the listed substance that your facility manufactured, imported, or processed during the corporate fiscal year preceding the reporting year.
	Year ending
	Quantity manufactured kg
	Quantity imported kg
	Quantity processed kg
2.03 <u>CBI</u> [_]	State the quantity of the listed substance that your facility manufactured, imported, or processed during the 2 corporate fiscal years preceding the reporting year in descending order. N/A Year ending
*	Quantity manufactured kg
	Quantity imported kg
	Quantity processed kg
	Year ending [_]_] [_]_] Mo. Year
	Quantity manufactured kg
	Quantity imported kg
	Quantity processed kg
[_]	Mark (X) this box if you attach a continuation sheet.

2.04	State the quantity of the listed substance that your facility manufactured, imported, or processed during the 3 corporate fiscal years preceding the reporting year in descending order.
CBI	NA
[_]	Year ending [_]_]_ [_]_] [_]_] Mo. Year
	Quantity manufactured kg
	Quantity imported kg
	Quantity processed kg
	Year ending []] []_] Mo. Year
	Quantity manufactured kg
	Quantity imported kg
	Quantity processed kg
	Year ending [_]_] [_]_] Mo.
	Quantity manufactured kg
	Quantity imported kg
	Quantity processed kg
2.05 <u>CBI</u>	Specify the manner in which you manufactured the listed substance. Circle all appropriate process types. \mathcal{N}/\mathcal{A}
[_]	Continuous process
	Semicontinuous process
	Batch process
l]	Mark (X) this box if you attach a continuation sheet.

2.06 CBI	Specify the manner in appropriate process type	which you processed t pes.	he listed substance.	Circle all
[_]	Continuous process			
	Semicontinuous process	• • • • • • • • • • • • • • • • • • • •		2
	Batch process	• • • • • • • • • • • • • • • • • • • •		
2.07 <u>CBI</u>	State your facility's substance. (If you are question.)			
[_]	u/k			
	Manufacturing capacity			
	Processing capacity		····· _	kg/yr
2.08 CBI	If you intend to increamanufactured, imported year, estimate the increase volume.	, or processed at any	time after your curre	ent corporate fiscal
[_]	Alu	Manufacturing Quantity (kg)	Importing Quantity (kg)	Processing Quantity (kg)
	Amount of increase			
	Amount of decrease			
4.5				

2.09	'For the three largest volume manufacturing or processing process listed substance, specify the number of days you manufactured substance during the reporting year. Also specify the average day each process type was operated. (If only one or two operatist those.)	or processed number of h	the listed ours per
<u>CBI</u>			Averes
[_]		Days/Year	Average Hours/Day
	Process Type #1 (The process type involving the largest quantity of the listed substance.)	٠	
	Manufactured	A	
	Processed	236	<u>2.17</u>
	Process Type #2 (The process type involving the 2nd largest quantity of the listed substance.)		
	Manufactured		
	Processed	Management Associated Published September 1	
	Process Type #3 (The process type involving the 3rd largest quantity of the listed substance.)		
	Manufactured	•	
	Processed		
2.10 <u>CBI</u> [_]	State the maximum daily inventory and average monthly inventory substance that was stored on-site during the reporting year in chemical. N/A Maximum daily inventory Average monthly inventory	the form of	
[_]	Mark (X) this box if you attach a continuation sheet.		

	etc.).	the product (e.g., car	rryover from raw	materiar, reactive	
	CAS No.	Chemical Name	Byproduct, Coproduct or Impurity ¹	Concentration (%) (specify ± % precision)	Source of By- products, Co- products, or Impurities
;	26471-62-5	80/20 TOI	4/5	4/K	u/k_
	:				

	a.	b. % of Quantity Manufactured, Imported, or	c. % of Quantity Used Captively	y
	Product Types ¹	Processed	0n-Site	Type of End-Us NA
-				
-				
	**IUse the following cod A = Solvent B = Synthetic reactan C = Catalyst/Initiato	zer/Scavenger/ it it/Sequestrant it/Degreaser in modifier/Antiwear fier thesive and additives	L = Moldable/Castab M = Plasticizer N = Dye/Pigment/Col O = Photographic/Re and additives P = Electrodepositi Q = Fuel and fuel a R = Explosive chemi S = Fragrance/Flavo T = Pollution contr U = Functional flui V = Metal alloy and W = Rheological mod X = Other (specify)	micals and additives vor chemicals trol chemicals uids and additives nd additives odifier
;	Use the following cod I = Industrial	es to designate the CS = Cons		

2.13 <u>CBI</u> [_]	Expected Product Types import, or process using corporate fiscal year. import, or process for substance used during used captively on-site types of end-users for explanation and an example.	ng the listed substar For each use, specent each use as a percent the reporting year. as a percentage of each product type.	nce at any time after ify the quantity you ntage of the total vo Also list the quanti the value listed unde	your current expect to manufacture, lume of listed ty of listed substance r column b., and the		
	a.	. b.	c.	d.		
	Product Types ¹	% of Quantity Manufactured, Imported, or Processed	% of Quantity Used Captively On-Site	Type of End-Users ²		
		100%	100%	NA		
	¹ Use the following code	es to designate prod	uct types:			
	A = Solvent	•	L = Moldable/Castabl M = Plasticizer	e/Rubber and additives		
	<pre>B = Synthetic reactan C = Catalyst/Initiato</pre>	r/Accelerator/	<pre>N = Dye/Pigment/Colorant/Ink and addit: 0 = Photographic/Reprographic chemical and additives</pre>			
	Sensitizer D = Inhibitor/Stabili	zer/Scavenger/				
	Antioxidant	_	P = Electrodeposition/Plating chemicals			
	E = Analytical reagen		Q = Fuel and fuel ad			
	F = Chelator/Coagulan		<pre>R = Explosive chemic S = Fragrance/Flavor</pre>			
	<pre>G = Cleanser/Detergen H = Lubricant/Friction</pre>		T = Pollution contro			
		n modifier/Antiwear	U = Functional fluid			
	agent I = Surfactant/Emulsi	fier	V = Metal alloy and			
	J = Flame retardant		W = Rheological modi			
	<pre>K = Coating/Binder/Ad</pre>	hesive and additives				
	² Use the following cod	es to designate the	type of end-users:			
	I = Industrial	CS = Cons				
	CM = Commercial	H = Othe	r (specify)			
		•				
.—.						
lj	Mark (X) this box if y	ou attach a continua	tion sneet.			

· ·	a. NA	b. Final Product's	c. Average % Composition of Listed Substance	d. Type of
	Product Type ¹	Physical Form ²	in Final Product	End-Users ³
	<pre>1 Use the following cod A = Solvent</pre>	es to designate pro		e/Rubber and additive
if	B = Synthetic reactan	t	M = Plasticizer	
	C = Catalyst/Initiato	r/Accelerator/		rant/Ink and additive
	Sensitizer	,	0 = Photographic/Rep	rographic chemical
	D = Inhibitor/Stabili	zer/Scavenger/	and additives	n/Dlating shomicals
	Antioxidant	•	P = Electrodeposition Q = Fuel and fuel add	
	<pre>E = Analytical reagen F = Chelator/Coagulan</pre>	t/Seguestrant	R = Explosive chemical	
	G = Cleanser/Detergen		S = Fragrance/Flavor	
4	H = Lubricant/Frictio	n modifier/Antiwear		
	agent	ii modifici/miciwcar	U = Functional fluid:	
	I = Surfactant/Emulsi	fier	V = Metal alloy and a	
	J = Flame retardant		W = Rheological modi:	
	<pre>K = Coating/Binder/Ad</pre>	hesive and additive		
	² Use the following cod	es to designate the	final product's physic	cal form:
	A = Gas	F2 = Cry	stalline solid	
	B = Liquid	F3 = Gran		
	C = Aqueous solution	F4 = Other	er solid	
	D = Paste	G = Gel		
	E = Slurry F1 = Powder	H = Oth	er (specify)	···
	³ Use the following cod			,
	<pre>I = Industrial CM = Commercial</pre>	CS = Cons	sumer er (specify)	
	Cr = Commercial	n = ocn		

2.15 CBI	liste	le all applicable modes of transportation used to deliver bulk shipments of ed substance to off-site customers.	
[_]	Truck	$_{\mathbf{k}}$ \mathcal{N}/\mathcal{A}	1
_		car	
	Barge	e, Vessel	3
		line	
	Plane	e	5
	0ther	r (specify)	6
2.16 <u>CBI</u> [_]	or pr of er	omer Use Estimate the quantity of the listed substance used by your cust repared by your customers during the reporting year for use under each cate nd use listed (i-iv). gory of End Use	
	i.	Industrial Products	
	1.	Chemical or mixture	le er / 122
		Article	
	ii.	•	Kg/yi
	11.	Commercial Products Chemical or mixture	le on / 122
		Article	
	iii.		Kg/JI
		Chemical or mixture	ko/vr
		Article	kg/yr
	iv.	Other	6, , -
	•	Distribution (excluding export)	kg/yr
		Export	kg/yr
		Quantity of substance consumed as reactant	kg/yr
		Unknown customer uses	kg/yr
			01-7
<u></u> 1	Mark	(X) this box if you attach a continuation sheet.	

]		1.	
	In bulk	NA	kg/
	As a mixture	NA	kg/
	In articles	NA	kg

SECTION 3 PROCESSOR RAW MATERIAL IDENTIFICATION

<u>CBI</u> [_]	Specify the quantity purchased and the average price paid for the listed substance for each major source of supply listed. Product trades are treated as purchases. The average price is the market value of the product that was traded for the listed substance.						
	Source of Supply	Quantity (kg)	Average Price (\$/kg)				
	The listed substance was manufactured on-site.						
	The listed substance was transferred from a different company site.		<u> </u>				
	The listed substance was purchased directly from a manufacturer or importer.	1,470,188	2.09				
	The listed substance was purchased from a distributor or repackager.						
	The listed substance was purchased from a mixture producer.						
3.02 CBI	Circle all applicable modes of transportation used to your facility.		_				
`	Railcar						
	Barge, Vessel	• • • • • • • • • • • • • • • • • • •	3				
	Pipeline		4				
	Pipeline						
	•		5				

Tank rail cars	1	Circle all applicable containers used to transport the listed sub facility.	stance to	you
Free standing tank cylinders Tank rail cars Hopper cars Tank trucks Hopper trucks Drums Pipeline Other (specify) b. If the listed substance is transported in pressurized tank cylinders, tank racars, or tank trucks, state the pressure of the tanks. Tank cylinders Tank rail cars	.}	Bags	• • • • • • • •	
Tank rail cars Hopper cars Tank trucks Hopper trucks Drums Pipeline Other (specify) b. If the listed substance is transported in pressurized tank cylinders, tank ra cars, or tank trucks, state the pressure of the tanks. Tank cylinders Tank rail cars		Boxes	• • • • • • • • •	
Hopper cars Tank trucks Hopper trucks Drums Pipeline Other (specify) b. If the listed substance is transported in pressurized tank cylinders, tank racars, or tank trucks, state the pressure of the tanks. Tank cylinders Tank rail cars		Free standing tank cylinders	• • • • • • • • •	
Tank trucks Hopper trucks Drums Pipeline Other (specify) b. If the listed substance is transported in pressurized tank cylinders, tank racars, or tank trucks, state the pressure of the tanks. Tank cylinders Tank rail cars		Tank rail cars	• • • • • • • • •	
Hopper trucks Drums Pipeline Other (specify) b. If the listed substance is transported in pressurized tank cylinders, tank racars, or tank trucks, state the pressure of the tanks. Tank cylinders Tank rail cars		Hopper cars	• • • • • • • • •	
Drums Pipeline Other (specify) b. If the listed substance is transported in pressurized tank cylinders, tank racars, or tank trucks, state the pressure of the tanks. Tank cylinders Tank rail cars		Tank trucks	• • • • • • • • • •	
Pipeline Other (specify) b. If the listed substance is transported in pressurized tank cylinders, tank racars, or tank trucks, state the pressure of the tanks. Tank cylinders		Hopper trucks	• • • • • • • • •	
Other (specify) b. If the listed substance is transported in pressurized tank cylinders, tank racars, or tank trucks, state the pressure of the tanks. Tank cylinders Tank rail cars		Drums	• • • • • • • • •	
b. If the listed substance is transported in pressurized tank cylinders, tank racars, or tank trucks, state the pressure of the tanks. Tank cylinders		Pipeline	• • • • • • • • •	
Tank cylinders		Other (specify)		•••
Tank rail cars	b.	If the listed substance is transported in pressurized tank cylinder cars, or tank trucks, state the pressure of the tanks	ers, tank	rai
		-		
Comb. Association		Tank cylinders		
Tank trucks		Tank cylinders Tank rail cars		— w
	ng di	Tank cylinders		_ _ m
	es.	Tank cylinders Tank rail cars		_ m
		Tank cylinders Tank rail cars		_ _ m
		Tank cylinders Tank rail cars		_ m
		Tank cylinders Tank rail cars		
		Tank cylinders Tank rail cars		_ n
		Tank cylinders Tank rail cars		_ m
		Tank cylinders Tank rail cars		_ m
		Tank rail cars Tank trucks		_ m
		Tank rail cars Tank trucks		_ m

[_] Mark (X) this box if you attach a continuation sheet.

PART	B RAW MATERIAL IN THE	E FORM OF A MIXTURE	,	3 1
3.04 CBI	If you obtain the list of the mixture, the material average percent components	sted substance in the name of its supplier(s)		timate of the
	Trade Name	Supplier or Manufacturer	Average % Composition by Weight (specify ± % precision)	Amount Processed (kg/yr)
	·			

[_] Mark (X) this box if you attach a continuation sheet.

BI reporting year in the f	he listed substance used as a sorm of a class I chemical, clas, by weight, of the listed subs	ss II chemical, or polymer, and
 '	Quantity Used (kg/yr)	% Composition by Weight of Listed Substance in Raw Material (specify \pm % precision
Class I chemical	1,470, 188	100%
Class II chemical		
Polymer		•

SECTION	٨.	DHVCTCAT	/CHEMICAL	PROPERTIES
30.0 . 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4	PRINIL AL	/ L.M.P.P. 1 L.M.L.	FRUFFIREIFIG

Gene	ral	Tne	truc	tic	: פתר
uene	LOL	1113	$\iota \iota \iota \iota \iota$	L 1 (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

If you are reporting on a mixture as defined in the glossary, reply to questions in Section 4 that are inappropriate to mixtures by stating "NA -- mixture."

For questions 4.06-4.15, if you possess any hazard warning statement, label, MSDS, or other notice that addresses the information requested, you may submit a copy or reasonable facsimile in lieu of answering those questions which it addresses.

PART	Α	PHYSTCAL	/CHEMICAL	DATA	SUMMARY

4.01	Specify the percent purity for the three major technical grade(s) of the listed
	substance as it is manufactured, imported, or processed. Measure the purity of the
CBI	substance in the final product form for manufacturing activities, at the time you
	import the substance, or at the point you begin to process the substance.
[_]	

	Manufacture	Import	Process
Technical grade #1	NA % purity	NA % purity	100 % purity
Technical grade #2	NA % purity	NA % purity	NA % purity
Technical grade #3	NA % purity	NA % purity	NA % purity

 $^{^{1}}$ Major = Greatest quantity of listed substance manufactured, imported or processed.

4.02	Submit your most recently updated Material Safety Data Sheet (MSDS) for the listed substance, and for every formulation containing the listed substance. If you possess
	an MSDS that you developed and an MSDS developed by a different source, submit your version. Indicate whether at least one MSDS has been submitted by circling the
	appropriate response.

Yes	1
No	2
Indicate whether the MSDS was developed by your company or by a diffe	erent source.
Your company	
Another source	$\overline{2}$

Mark (X) this box if you attach a continuation sheet.

MATERIAL SAFETY DATA SHEET

ICI Polyurethanes Group

West Depitord, New Jersey 08066 Phone, 24 hours: (302) 575-3000 Medical inquiries: (800) 327-8633 2290

07080R Rev.: F

Date: 02/06/89

SECTION 1 NAME & HAZARD SUMMARY

Material name: RUBINATE TDI

Hazard summary (as defined by OSHA Hazard Comm. Std., 29 CFR 1910.1200):

Physical hazards: Unstable.

Health hazards: Corrosive (eye), irritant (skin, respiratory passages, skin sensitizer), inhalation (TLV), harmful pulmonary (lung) sensitizer. Based on TDI - harmful (respiratory sensitizer, lung injury).

Read the entire MSDS for a more thorough evaluation of the hazards.

Toluene diisocyanate, 2,4-isomer (CAS 584-84-9) Toluene diisocyanate, 2,6-isomer (CAS 91-08-7)	80	0.005 ppm
TOIUENE CLISOCVANATE, 2.6-ISOMET (CAS 91-08-7)		
	20	Not listed

Ingredients not precisely identified are proprietary or nonhazardous. Values are not product specifications.

SECTION 3 PHYSICAL DATA

Appearance and odor: Clear, colorless liquid with sharp odor

Boiling point: 484°F, 251.1°C

Vapor pressure (mm Hg at 20°C): 0.02

Vapor density (air = 1): 6.0 Solubility in water: Reacts

pH: No data

Specific gravity: 1.22

% Volatile by volume: No data

SECTION 4 FIRE AND EXPLOSION HAZARD DATA

Flash point: 270°F, 132°C (OC) Autoignition temperature: No data Flammable limits (STP): 0.9-9.5%

Extinguishing media:

Dry chemical, foam, carbon dioxide, halogenated agents. If water is used, use very large quantities. The reaction between water and hot isocyanate may be vigorous.

Special fire fighting protective equipment:

Self-contained breathing apparatus with full facepiece and protective clothing.

SECTION 4 FIRE AND EXPLOSION HAZARD DATA (continued)

Unusual fire and explosion hazards:

Water contamination will produce carbon dioxide. Do not reseal contaminated containers as pressure buildup may rupture them.

SECTION 5 REACTIVITY DATA

Stability:

Stable under normal conditions.

Incompatibility:

This product will react with any materials containing active hydrogens, such as water, alcohol, ammonia, amines, alkalies and acids. The reaction with water is very slow under 50°C, but is accelerated at higher temperatures and in the presence of alkalies, tertiary amines, and metal compounds. Some reactions can be violent.

Hazardous decomposition products:

Combustion products: Carbon dioxide, carbon monoxide. Nitrogen oxides, ammonia. Trace amounts of hydrogen cyanide.

Hazardous polymerization:

May occur. High temperatures in the presence of alkalies, tertiary amines, and metal compounds will accelerate polymerization. Possible evolution of carbon dioxide gas may rupture closed containers.

SECTION 6 HEALTH HAZARD ASSESSMENT

General:

The health hazard assessment is based on an evaluation of the chemical composition together with information from a search of the scientific literature and other commercial sources.

Ingestion:

The acute oral LD50 in rat is reported to be 5,800 mg/kg. Relative to other materials, this material is classified as "practically nontoxic" by ingestion. In humans, irritation or chemical burns of the mouth, pharynx, esophagus and stomach can develop following ingestion. Injury may be severe and cause death.

Eye contact:

This material is reported to induce chemical burns in rabbit eye studies; a similar degree of eye injury may develop after contact with human eyes.

Skin contact:

This material is reported to be severely irritating in rabbit dermal irritation studies and will probably irritate human skin. Skin sensitization and irritation may develop after repeated and/or prolonged contact with human skin.

Skin absorption:

The acute dermal ${\rm LD}_{50}$ in rabbit is reported to be above 16 g/kg. Systemically toxic concentrations of this product will probably not be absorbed through human skin.

SECTION 6 HEALTH HAZARD ASSESSMENT (continued)

Inhalation:

Vapors and aerosols can irritate eyes, nose and respiratory passages. TDI wapors are easily generated and are lethal to rats via inhalation at concentrations below 10 ppm. A no effect level for rats of about 0.1 ppm was determined from a subacute study. This and other data indicate the vapors and aerosols of TDI are highly toxic relative to the vapors of other compounds. Vapors and aerosols of TDI strongly irritate the upper and lower respiratory tract. Human experience indicates that TDI will induce an asthma-like respiratory sensitization in some individuals. If applications which involve spraying (e.g. aerosols and mists) or if elevated temperatures are used, even higher vapor concentrations may result and introduce a greater degree of risk of inhalation injury. Rat and mouse toxicity and carcinogenicity studies were conducted with two years of inhalation exposure to vapors of TDI at concentrations of 0.05 and 0.15 ppm. No indication of carcinogenic effect was observed. However, mice exposed to 0.15 ppm for two years showed reduced weight gain and signs of irritation in the upper and lower respiratory tract. No other effect of toxicological significance was observed.

Other effects of overexposure:

There are two studies which allege that workers exposed to TDI at or near the current TLV have experienced impaired ventilatory capacities. These findings have not been independently substantiated. The National Toxicology Program (NTP) 4th Annual Report on Carcinogens (1985) lists TDI as a substance that may reasonably be anticipated to be a carcinogen based on a NTP Technical Report. In the cited study, laboratory animals gavaged TDI in corn oil developed cancer. In our view, the inhalation study is of more potential biological relevance to man.

First aid procedures:

<u>Skin</u>: Wash material off of the skin with plenty of soap and water. If redness, itching, or a burning sensation develops, get medical attention. Wash contaminated clothing and decontaminate footwear before reuse.

Eyes: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined and treated by medical personnel.

<u>Inquestion</u>: Do not induce vomiting. Give 1 or 2 glasses of water to drink and refer person to medical personnel. (Never give anything by mouth to an unconscious person.)

<u>Inhalation</u>: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is labored, give oxygen. Consult medical personnel.

Note to physician: Probable mucosal damage may contraindicate the use of gastric lavage following ingestion.

SECTION 7 SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled:

Wear skin, eye, and respiratory protection during cleanup. Soak up material with absorbent and showel into a chemical waste container. Cover container, but do not seal, and remove from work area. Prepare a decontamination solution of 0.2-5% liquid detergent and 3-8% concentrated ammonium hydroxide in water (5-10% sodium carbonate may be substituted for the ammonium hydroxide). Follow the precautions on the supplier's material safety data sheets. All operations should be performed by trained personnel familiar with the hazards of the chemicals used. Treat the spill area with the decontamination solution, using about 10 parts of solution for each part of the spill, and allow it to react for at least 10 minutes. Carbon dioxide will be evolved, leaving insoluble polyureas. For major spills, call CHEMTREC (Chemical Transportation Emergency Center) at 800-424-9300.

Disposal method:

Slowly stir the isocyanate waste into the decontamination solution described above using 10 parts of the solution for each part of the isocyanate. Let stand for 48 hours, allowing the evolved carbon dioxide to vent away. Neutralize the waste. Neither the solid nor the liquid portion is a hazardous waste under RCRA, 40 CFR 261.

Container disposal:

Drums must be decontaminated in properly ventilated areas by personnel protected from the inhalation of isocyanate vapors. Spray or pour 5-15 liters of decontaminating solution into the drum, making sure the walls are well rinsed. Leave the drum soaking unsealed for 48 hours. Pour out the decontaminating solution and triple rinse the empty container. Puncture or otherwise destroy the rinsed container before disposal.

SECTION 8 SPECIAL PROTECTION INFORMATION

TLV® or suggested control value:

The ACGIH TLV, OSHA PEL, and NIOSH recommendation for TDI is 0.005 ppm 8-hour TWA, 0.02 ppm STEL.

Ventilation:

If needed, use local exhaust ventilation to keep airborne concentrations below the TLV. Follow guidelines in the ACGIH publication "Industrial Ventilation". Exhaust air may need to be cleaned by scrubbers or filters to reduce environmental contamination.

Respiratory protection:

Because of the low vapor pressure, ventilation is usually sufficient to keep vapors below the TLV at room temperatures. Exceptions are when the material is sprayed or heated. If airborne concentrations exceed or are expected to exceed the TLV, use MSHA/NIOSH approved positive pressure supplied air respirator with a full facepiece or an air supplied hood. For emergencies, use a positive pressure self-contained breathing apparatus. Air purifying (cartridge type) respirators are not approved for protection against isocyanates.

SECTION 8 SPECIAL PROTECTION INFORMATION (continued)

Protective clothing:

Gloves determined to be impervious under the conditions of use. Depending on conditions of use, additional protection may be required such as apron, arm covers, or full body suit. Wash contaminated clothing before rewearing. The literature indicates that clothing constructed of butyl rubber, Viton, Silver Shield, Saranex coated Tyvek, as well as some nitrile rubber and polyvinyl alcohol (PVA) coated garments have excellent resistance to permeation by TDI. Clothing constructed of Teflon, as well as some garments constructed of nitrile rubber, natural rubber and PVA exhibited limited resistance to permeation by TDI. Some clothing constructed of natural rubber or polyethylene exhibited little resistance to permeation by TDI. Protective clothing should be selected and used in accordance with "Guidelines for the Selection of Chemical Protective Clothing" published by ACGIH.

Eye protection:

Chemical tight goggles and full faceshield.

Other protective equipment:

Eyewash station and safety shower in work area.

SECTION 9 SPECIAL PRECAUTIONS OR OTHER COMMENTS

Special precautions or other comments:

Prevent skin and eye contact. Observe TLV limitations. Avoid breathing vapors or aerosols. Workers should shower and change to fresh clothing after each shift. A sensitized individual should not be exposed to the product which caused the sensitization. Store in tightly sealed containers to protect from atmospheric moisture. Store in a cool area. Individuals with existing respiratory disease such as chronic bronchitis, emphysema or asthma should not be exposed to isocyanates. These individuals should be identified through baseline and annual evaluation and removed from further exposure. Medical examination should include medical history, vital capacity, and forced expiratory volume at one second.

SECTION 10 REGULATORY INFORMATION

TSCA (Toxic Substances Control Act) Regulations, 40 CFR 710: All ingredients are on the TSCA Section 8(b) Inventory.

CERCLA and SARA Regulations (40 CFR 355, 370, and 372):

Section 313 Supplier Notification. This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372: 100% TDI (CAS 584-84-9 and 91-08-7).

State Regulations:

California Proposition 65: No warnings are necessary.

The information herein is given in good faith but no warranty, expressed or implied, is made.

4.03	Submit a copy or reasonable facsimile of any hazard information (other than an MSDS) that is provided to your customers/users regarding the listed substance or any formulation containing the listed substance. Indicate whether this information has been submitted by circling the appropriate response.
	Yes

4.04 For each activity that uses the listed substance, circle all the applicable number(s) corresponding to each physical state of the listed substance during the activity listed. Physical states for importing and processing activities are determined at the time you import or begin to process the listed substance. Physical states for manufacturing, storage, disposal and transport activities are determined using the final state of the product.

		Phy	sical State			
Activity	Solid	Slurry	Liquid	Liquified Gas	Gas	
Manufacture	1	2	3	4	5	
Import	1	2	3	4	5	
Process	1	2	3	4	5	
Store	1	2	3	4	5 .	
Dispose	1	2	3	4	5	
Transport	1	2	3	4	5	

[_] Mark (X) this box if you attach a continuation sheet.

CBI	following activities, indicate for each applicable physical state the size ar percentage distribution of the listed substance by activity. Do not include particles ≥10 microns in diameter. Measure the physical state and particle simporting and processing activities at the time you import or begin to processing listed substance. Measure the physical state and particle sizes for manufact storage, disposal and transport activities using the final state of the production.							and the let sizes for tess the acturing
	Physical State		Manufacture	Import	Process	Store	Dispose	Transport
	Dust	<1 micron	NA	NA	NA	NA	NA	NA_
		1 to <5 microns						
		5 to <10 microns						
	Powder	<pre><1 micron 1 to <5 microns</pre>	NA	NA	NA	NA	NA	NA
		5 to <10 microns						
	Fiber	<pre><1 micron 1 to <5 microns</pre>	_NA	_ <i>NA</i> _	<u>N/A</u>		NA	_NA_
		5 to <10 microns						
*	Aerosol	<1 micron	NA	NA	NA	WA	NA	NA
		1 to <5 microns	• 7 • • • • • • • • • • • • • • • • • •					
		5 to <10 microns						
	Mark (Y)	this box if you atta	uch a continua	tion she	<u> </u>		* * * * * * * * * * * * * * * * * * * *	

4.06	For each physical state of the listed substance, specify the corresponding flashpoint, and the test method used to derive the flashpoint value.	
	Solid	
	Flashpoint NA	0
	Test method	
	<u>Liquid</u>	
	Flashpoint	0
	Test method	
	Gas/Vapor	
	Flashpoint	0
Ą	Test method	
¥	Indicate if hazard information/MSDS has been submitted in lieu of response by circling the appropriate response.	
	Yes	
	No	
4.07	Indicate the temperature at which the listed substance undergoes autopolymerization or autodecomposition.	 1
	Autopolymerizes at	۰(
	Autodecomposes at	٥(
	Indicate if hazard information/MSDS has been submitted in lieu of response by circling the appropriate response.	
	Yes	1
	No	2

4.08	Indicate the flammable limits in air (% by volume) for the listed substance at standard temperature and pressure.					
	Lower limit					
	Upper limit					
	Indicate if hazard information/MSDS has been submitted in lieu of response by circling the appropriate response.					
	Yes					
	No					

$\mathcal{N}^{\mathcal{A}}$	Product	Types Co	ntainir	ng the I	Listed	Subs
Extinguishing Media	1	2	3	4	5	
Water						-
Foam				· · · · · · · · · · · · · · · · · · ·		*****
CO ₂	, 					
Dry chemical (e.g., sodium bica	arbonate)				-	
Halogenated hydrocarbon (e.g., tetrachloride, methyl bromide	<u> </u>				*******	
Other (specify)						
No						
¹ Identify the product types lis	**					
	**	 olumn (1	 -6) in		lowing	
¹ Identify the product types lis	**	 olumn (1	 -6) in	the fol	lowing	
¹ Identify the product types lis	**	 olumn (1	 -6) in	the fol	lowing	
Identify the product types list Product Type No. NA	**	 olumn (1	 -6) in	the fol	lowing	
Identify the product types list Product Type No. NA 1 2	**	 olumn (1	 -6) in	the fol	lowing	
Identify the product types list Product Type No. NA 1 2 3	**	 olumn (1	 -6) in	the fol	lowing	
Identify the product types list Product Type No. 1 2 3 4	**	 olumn (1	 -6) in	the fol	lowing	
Identify the product types list Product Type No. NA 1 2 3 4 5	**	 olumn (1	 -6) in	the fol	lowing	
Identify the product types list Product Type No. NA 1 2 3 4 5	**	 olumn (1	 -6) in	the fol	lowing	
Identify the product types list Product Type No. NA 1 2 3 4 5	**	 olumn (1	 -6) in	the fol	lowing	

firefighting procedures used to combat	: fires cau	ised by	each pr	coduct t	type whi	ic <mark>h , </mark>
h) A	Product 1	Types Co	ntainir	ng the I	Listed S	Substance ¹
Special Firefighting Procedures	1	2	3	4	5	_6_
Do not use water						
Do not increase air pressure						
Other (specify)						*****
			itted in	n lieu d	of	
Yes						1
No						2
Product Type No. 1 2 3 4		Produc	ct Type	Identi	ty	
_	-					
	firefighting procedures used to combate contains the listed substance. (Refer NA and UK.) Special Firefighting Procedures Do not use water Do not increase air pressure Other (specify) Indicate if hazard information/MS response by circling the approprious tyes	firefighting procedures used to combat fires cat contains the listed substance. (Refer to the in NA and UK.) Product 7 Special Firefighting Procedures 1 Do not use water Do not increase air pressure Other (specify) Indicate if hazard information/MSDS has been response by circling the appropriate response to the specific strength of the sp	firefighting procedures used to combat fires caused by contains the listed substance. (Refer to the instruction NA and UK.) Product Types Contained Procedures Special Firefighting Procedures Do not use water Do not increase air pressure Other (specify) Indicate if hazard information/MSDS has been submit response by circling the appropriate response. Yes No 1 Identify the product types listed under each column (1) Product Type No. Product 1 2 3 4 5	firefighting procedures used to combat fires caused by each procedurations the listed substance. (Refer to the instructions for NA and UK.) Product Types Containing Special Firefighting Procedures Do not use water Do not increase air pressure Other (specify) Indicate if hazard information/MSDS has been submitted in response by circling the appropriate response. Yes No Product Type No. Product Type No. Product Type 1 2 3 4 5	firefighting procedures used to combat fires caused by each product to contains the listed substance. (Refer to the instructions for defining NA and UK.) Product Types Containing the I Special Firefighting Procedures 1 2 3 4 Do not use water Do not increase air pressure Other (specify) Indicate if hazard information/MSDS has been submitted in lieu or response by circling the appropriate response. Yes No Product Type No. Product Type No. Product Type No. Product Type Identify 2 3 4 5	Product Types Containing the Listed S Special Firefighting Procedures 1 2 3 4 5 Do not use water Do not increase air pressure Other (specify) Indicate if hazard information/MSDS has been submitted in lieu of response by circling the appropriate response. Yes

	CAS No.	<u>Name</u>	Reaction (specify)		
		d information/MSDS has been			
	Yes				
	No				
	Autoxidation Is the appropriate response.	listed substance capable o	of autoxidation? Circle the		
A	Yes				
	No				
	Unknown				
1.		d information/MSDS has been ing the appropriate respons			
	Yes				
	No				

4.13	Indicate the autoignition temperature for the listed substance and the test method used to derive this value.	
	Autoignition temperature	٥٥
NA	Test method	
	Indicate if hazard information/MSDS has been submitted in lieu of response by circling the appropriate response.	
	Yes	1
	No	2
4.14	Vapor in Cargo Tanks If storing the listed substance in a cargo tank causes vapor problems, such as peroxide formation, reaction with moisture, etc., specify the problem and necessary controls or restrictions used to remedy each problem.	_
NA	Vapor Problem Controls/Restrictions	
	Peroxide formation	
	Reaction with moisture	
	Combustion	
	Other (specify)	
	Indicate if hazard information/MSDS has been submitted in lieu of response by circling the appropriate response.	
	Yes	1
	No	2
•		—

N	Name of Additive	Inhibitor or <u>Stabilizer¹</u>	Amount Normally Added (ppm or %)	Duration of Effectivenes (specify units)	
	Indicate if hazard information response by circling the app		omitted in lieu	of	
	Yes				
I =	the following codes to design Inhibitor Stabilizer	nate inhibitor and s	stabilizer:		
5 =					

SECTION 5 ENVIRONMENTAL FATE

a.	Photolysis:	4/5		
	Absorption spectrum coefficient (peak)	(1/M cm)	at	nm
	Reaction quantum yield, 6			
	Direct photolysis rate constant, k_p , at	1/hr	lat	itud
b.	Oxidation constants at 25°C:			
	For ¹ 0 ₂ (singlet oxygen), k _{ox}	and the second s		1/M
	For RO_2 (peroxy radical), k_{ox}			1/M
c.	Five-day biochemical oxygen demand, BOD_5		-	mg/l
ď.	Biotransformation rate constant:			
	For bacterial transformation in water, k_b		***	1/hr
	Specify culture			
e.	Hydrolysis rate constants:			
	For base-promoted process, k _B	IN THE COLUMN TWO IS NOT THE COLUMN TWO IS N		1/M
	For acid-promoted process, k,			1/M
	For neutral process, k_N			1/hr
f.	Chemical reduction rate (specify conditions)			
g.	Other (such as spontaneous degradation)			

Media Groundwater Atmosphere Surface water		<u>Half-life</u>	(specif	y unit	<u>s)</u>
Atmosphere					
- -					
Surface water					
			····	······································	
Soil					
Identify the listed substance life greater than 24 hours.	e's known tra	nsformation	products	that l	nave a half-
CAS No.	Name				Media
			···	in	
				in	
	77.84			in	·
				in	
			•		at 25°0
			uk		at 25°C
ify the organic carbon-water ficient, K _{oc}	partition		uk		at 25°C
ify the Henry's Law Constant,	Н		чĸ		_atm-m³/mole
	CAS No. CAS No. cify the octanol-water partition of calculation or determined type	CAS No. Name Cas No. Name Cify the octanol-water partition coefficient of calculation or determination Cify the soil-water partition coefficient, type	CAS No. Name CAS No. Name (specify the octanol-water partition coefficient, Kow and of calculation or determination	The greater than 24 hours. CAS No. Name (specify units) Cas No. Cas No. Name (specify units) Cas No. Cas No. Name (specify units) Cas No. Cas No. Cas No. Name (specify units) Cas No. Cas No. Cas No. Name (specify units) Cas No. Cas No.	CAS No. Name Half-life (specify units) in in in eify the octanol-water partition coefficient, Kow Prod of calculation or determination Sify the soil-water partition coefficient, Kow Sify the organic carbon-water partition ficient, Koc

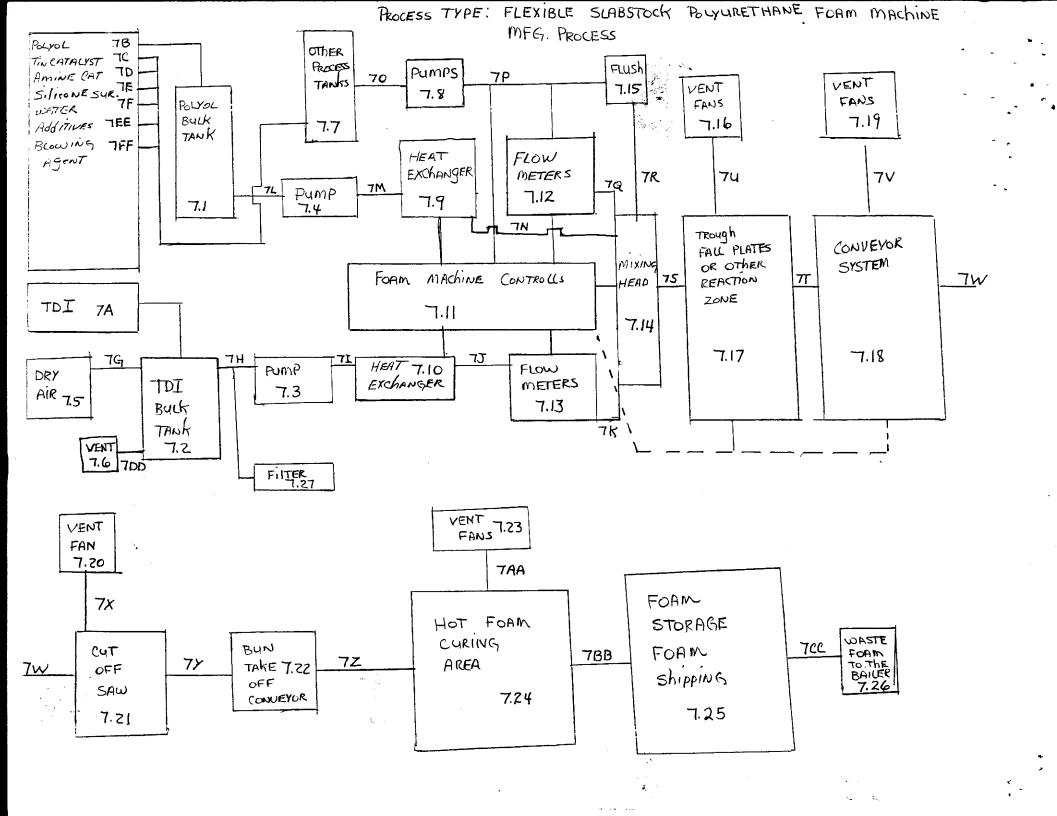
Bioconcentration Factor	<u>Species</u>	<u>Test¹</u>
Use the following codes to or F = Flowthrough S = Static	designate the type of test:	

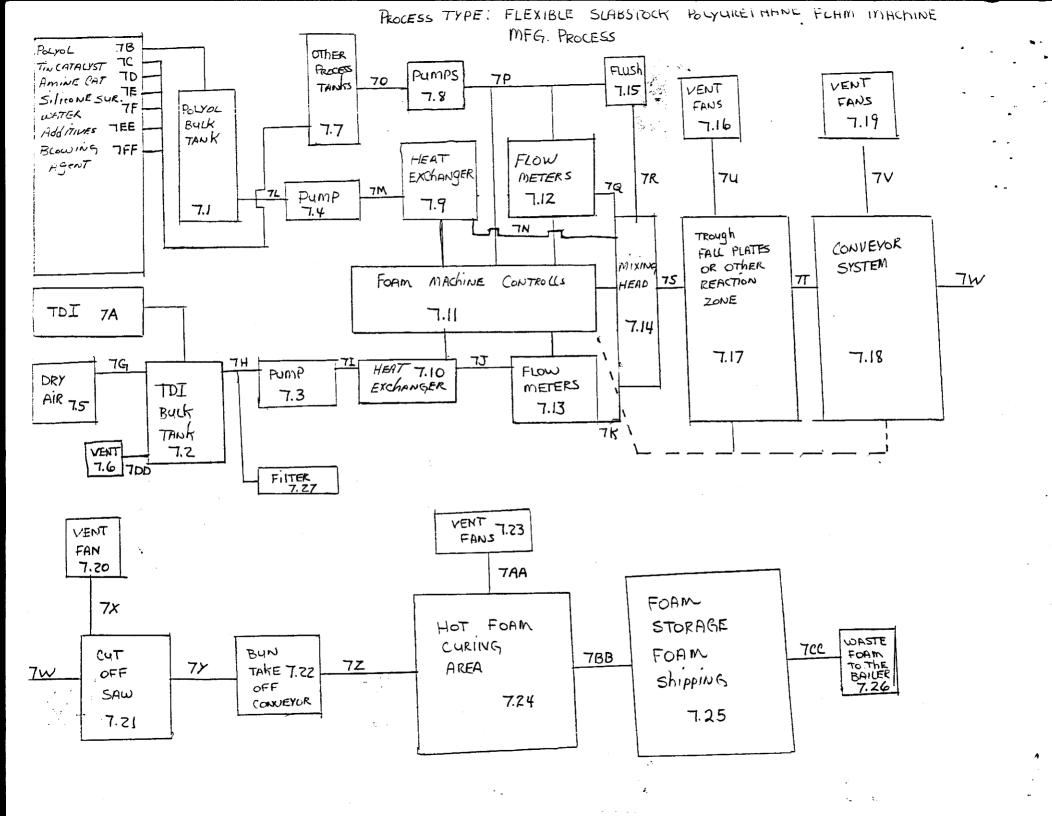
	,	Production
6.01	Company Type Circle the number which most appropriately desc	cribes your company.
<u>CBI</u>	Corporation NA Sole proprietorship	
	Partnership	
	Other (specify)	
6.02 CBI	At the end of the reporting year, were you constructing addition site that were not yet in operation at the end of the reporting now being used or will be used in the future for manufacturing, processing the listed substance? Circle the appropriate response	year, but which are importing, or
[_]	Yes	
CBI	List all of the product types that you manufacture that contain as a raw material, and the percentage of the name-plate capacit listed substance that each product type represents. The total percentiles should equal 100 percent. State the total name-pla process type(s) used to manufacture all product types that cont substance.	the listed substance y dedicated to the of all capacity te capacity of the
6.03 CBI	List all of the product types that you manufacture that contain as a raw material, and the percentage of the name-plate capacit listed substance that each product type represents. The total percentiles should equal 100 percent. State the total name-pla process type(s) used to manufacture all product types that cont	the listed substance y dedicated to the of all capacity te capacity of the
CBI	List all of the product types that you manufacture that contain as a raw material, and the percentage of the name-plate capacit listed substance that each product type represents. The total percentiles should equal 100 percent. State the total name-pla process type(s) used to manufacture all product types that cont substance.	the listed substance y dedicated to the of all capacity te capacity of the ain the listed
CBI	List all of the product types that you manufacture that contain as a raw material, and the percentage of the name-plate capacit listed substance that each product type represents. The total percentiles should equal 100 percent. State the total name-pla process type(s) used to manufacture all product types that cont substance.	the listed substance y dedicated to the of all capacity te capacity of the ain the listed
CBI	List all of the product types that you manufacture that contain as a raw material, and the percentage of the name-plate capacit listed substance that each product type represents. The total percentiles should equal 100 percent. State the total name-pla process type(s) used to manufacture all product types that cont substance.	the listed substance y dedicated to the of all capacity te capacity of the ain the listed

	_	Quantity Sold or	Total Sales
	Market \\	Transferred (kg/yr)	Value (\$/yr)
	Retail sales		
	Distribution Wholesalers		
	Distribution Retailers		
	Intra-company transfer		
	Repackagers		
	Mixture producers		·····
	Article producers		
	Other chemical manufacturers or processors		
	Exporters		
	Other (specify)		
.05	Substitutes List all known comme	ercially feasible substitut	es that you know exist
<u>BI</u>	Substitutes List all known common for the listed substance and state feasible substitute is one which is in your current operation, and which performance in its end uses.	the cost of each substitut s economically and technolo	e. A commercially gically feasible to use
	for the listed substance and state feasible substitute is one which is in your current operation, and which	the cost of each substitut s economically and technolo ch results in a final produ	e. A commercially gically feasible to use
<u>BI</u>	for the listed substance and state feasible substitute is one which is in your current operation, and which performance in its end uses.	the cost of each substitut s economically and technolo ch results in a final produ	e. A commercially gically feasible to use ct with comparable
<u>BI</u>	for the listed substance and state feasible substitute is one which is in your current operation, and which performance in its end uses.	the cost of each substitut s economically and technolo ch results in a final produ	e. A commercially gically feasible to use ct with comparable
<u>BI</u>	for the listed substance and state feasible substitute is one which is in your current operation, and which performance in its end uses.	the cost of each substitut s economically and technolo ch results in a final produ	e. A commercially gically feasible to use ct with comparable
<u>BI</u>	for the listed substance and state feasible substitute is one which is in your current operation, and which performance in its end uses.	the cost of each substitut s economically and technolo ch results in a final produ	e. A commercially gically feasible to use ct with comparable
<u>BI</u>	for the listed substance and state feasible substitute is one which is in your current operation, and which performance in its end uses.	the cost of each substitut s economically and technolo ch results in a final produ	e. A commercially gically feasible to use ct with comparable
<u>BI</u>	for the listed substance and state feasible substitute is one which is in your current operation, and which performance in its end uses.	the cost of each substitut s economically and technolo ch results in a final produ	e. A commercially gically feasible to use ct with comparable

6.06 CBI	State your average total and variable costs of manufacturing, importing, and processing the listed substance during the reporting year. (For an explanation of these costs, refer to the instructions.)					
[_]	Average Total Costs NA					
	Manufacturing	'kg				
	Importing	kg				
	Processing \$/	'kg				
	Average Variable Costs					
	Manufacturing	'kg				
	Importing \$/	kg				
	Processing	kg				
6.07 <u>CBI</u>	State your average purchase price of the listed substance, if purchased as a raw material during the reporting year.					
		_				
6.08 CBI	State your company's total sales and sales of the listed substance sold in bulk for the reporting year.					
[_]	Year ending	_] _r				
	Company's total sales (\$)					
	Sales of listed substance (\$)					
[_]	Mark (X) this box if you attach a continuation sheet.					

6.09 <u>CBI</u> [_]	State your company's total sales and sales of the listed substance sold in bulk for the corporate fiscal year preceding the reporting year. (Refer to the instructions for question 6.08 for the methodology used to answer this question.) Year ending
	Company's total sales (\$)
	Sales of listed substance (\$)
	Sales of fisted substance (5)
6.10 CBI	State your company's total sales and sales of the listed substance sold in bulk for the 2 corporate fiscal years preceding the reporting year in descending order. (Refer to the instructions for question 6.08 for the methodology used to answer this question.) \[\bigcup_{A} \] Year ending \ldots \[\bigcup_{B} \]
	Tear ending
	Company's total sales (\$)
	Sales of listed substance (\$)
	Year ending []_] []_] []_] []_]
	Company's total sales (\$)
	Sales of listed substance (\$)
[_]	Mark (X) this box if you attach a continuation sheet.





	SECTION 7 MANUFACTURING AND PROCESSING INFORMATION
Gener	al Instructions:
provi	uestions 7.04-7.06, provide a separate response for each process block flow diagram ded in questions 7.01, 7.02, and 7.03. Identify the process type from which the mation is extracted.
PART	A MANUFACTURING AND PROCESSING PROCESS TYPE DESCRIPTION
7.01 CBI	In accordance with the instructions, provide a process block flow diagram showing the major (greatest volume) process type involving the listed substance.
[_]	Process type FIEXIBLE POLYURETHANE FOAM MACHINE

7.02 CBI	In accordance with the instructions, provide a separate process block flow diagram showing each of the three major (greatest volume) process types involving the listed substance.
(⁻)	Process type NA
	~

7.03	In accordance with the instructions, provide a process block flow diagram showing all process emission streams and emission points that contain the listed substance and which, if combined, would total at least 90 percent of all facility emissions if not treated before emission into the environment. If all such emissions are released from one process type, provide a process block flow diagram using the instructions for question 7.01. If all such emissions are released from more than one process type, provide a process block flow diagram showing each process type as a separate block.					
	Process type FLEXIBLE POLYURETHANE FOAM MACHINE					

CBI	Process type	FLEXIBLE SU	ARSTOCK BLUMO	the Mark	
L }	Unit		MBSTOCK TOLYUR	Operating	<i>W</i> =
	Operation ID Number	Typical Equipment Type	Operating Temperature Range (°C)	Pressure Range (mm Hg)	Vessel Composition
	7,2	BUCK TANKS	20° 70 25.5°C	ATONOSPHANE	STEEL
	7. 3	Pump	Ambient	ATMOSPHERIC	STEEL
	7.6	VENT	AMBIRAT	ATMOSPHERIO	STEEC
	7. 5	Air COMPRESSOR	AMBIENT	<u>uk</u>	STEEL
	7.10	HEAT EX CHANGER	4°C TO 57°E	ATMOSPheric	STHINLESS STE
	7.13	FLOW METER	0°C 70 70°C	ATMOSpheric	GLASS (PRESSYRE)
	7.27	filter (TOI)	AMBIENT	HTWO Spheric	STEEL
	7.17	TROUGH, FALL PLATE	AMBIENT	Atmospheric	STEEL
	7.21	CUT OFF SAW	AMBIENT	<u>MA</u>	NA

[_]	Process type	FLEXIBLE SLAB STO	ock PolyuREThigNE T	CAM MACLINE
	Process Stream ID Code	Process Stream Description	Physical State	Stream Flow (kg/yr
IL, 7M,	7N,7B	PolyoL	OL	3,000,640
70,7P	PR7C	TIN CATALYST	_ O.L	13,502
70, 7P,	78,70	AMINE CATALYST	<u> </u>	4, 506
70,71	PIRTE	SILICONE SURFACTANT	<u> </u>	30,047
70,7P,	7R,7F	WATER	AL	12,000
70,79,7	RTEE	Add ITIVES	<u> </u>	25,772
70,79,7	RTFF	BLOWING AGENT	<u> </u>	313,636
G,7#,71,	7A, 75, 7K,700	TOI	OL_	1,470,188
	7ω	POLYURETHANE FOAM	20	4,865,785
	GC = Gas (conde GU = Gas (uncor SO = Solid	ensible at ambient temperature adensible at ambient temperatur slurry	and pressure) re and pressure)	
	SY = Sludge or AL = Aqueous li OL = Organic li	.quid	, 90% water, 10% toluen	e)

7.06 CBI	If a proces this questi	te each process stream identifies block flow diagram is placed in separation and complete it separation for further explanation	provided for mo ately for each	ore than one property	flow diagram(s). cess type, photocopy (Refer to the	
[_]	Process typ	De FLEXIBLE S	CAB STOCK /	LYURETHANE	Mach.	
	a.	b.	c.	d.	е.	
	Process Stream ID Code	Known Compounds ¹	Concen- trations ^{2,3} (% or ppm)	Other Expected Compounds	Estimated Concentrations (% or ppm)	
	76	Polyo L	100%	NA	NA	
	7 4	TOI	99.9	HYDROLYZABUE CHLORIDE	61%	
	75	POLYOL, TOIT SILICONE TIN, WATER, AMINE BLOWING A GUIT, AddiTIVES				
		_	100%	N/A	N/A	
	700	POLY URETHANE FOR M	100%	N/A	NA	
	,					
7.06	continued b	pelow				
	Mark (Y) +h	is how if you attach a co	ontinuation she	et		

7.	06	•	(continued)
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	·VV		(CONCINCO)

¹For each additive package introduced into a process stream, specify the compounds that are present in each additive package, and the concentration of each component. Assign an additive package number to each additive package and list this number in column b. (Refer to the instructions for further explanation and an example. Refer to the glossary for the definition of additive package.)

Additive Package Number	Components of Additive Package	Concentration (% or ppm)
1	FLAM RETAKDANI	3% VOL
	DYE	_, 0125 % Vol
W/A		-
<u> </u>		Wallacter Control of Market Ma
W/A		
70/71		
2 Use the following codes	to designate how the concentrat	ion was determined:
A = Analytical result E = Engineering judgemen	nt/calculation	
³ Use the following codes	to designate how the concentrate	ion was measured:
V = Volume W = Weight		

SECTION 8	RESIDUAL	TREATMENT	GENERATION,	CHARACTERIZATION,	TRANSPORTATION,	AND
	MANAGEMEN	VT				

General Instructions:

For questions 8.04-8.06, provide a separate response for each residual treatment block flow diagram provided in question 8.01, 8.02 or 8.03. Identify the process type from which the information is extracted.

For questions 8.05-8.33, the Stream Identification Codes are those process streams listed in either the Section 7 or Section 8 block flow diagrams which contain residuals for each applicable waste management method.

For questions 8.07-8.33, if residuals are combined before they are handled, list those Stream Identification Codes on the same line.

Questions 8.09-8.33 refer to the waste management activities involving the residuals identified in either the Section 7 or Section 8 block flow diagrams. Not all Stream Identification Codes used in the sample answers (e.g., for the incinerator questions) have corresponding process streams identified in the block flow diagram(s). These Stream Identification codes are for illustrative purposes only.

For questions 8.11-8.33, if you have provided the information requested on one of the EPA Office of Solid Waste surveys listed below within the three years prior to your reporting year, you may submit a copy or reasonable facsimile in lieu of answering those questions which the survey addresses. The applicable surveys are: (1) Hazardous Waste Treatment, Storage, Disposal, and Recycling Survey; (2) Hazardous Waste Generator Survey; or (3) Subtitle D Industrial Facility Mail Survey.

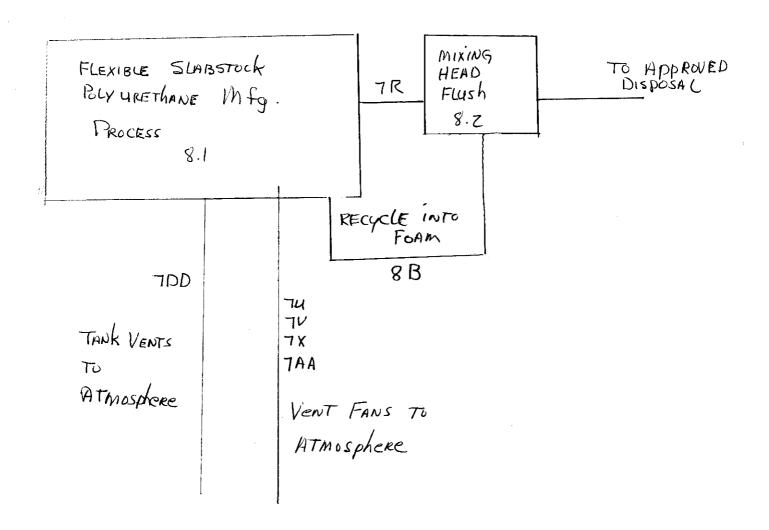
[_]	Mark (X)	this	box i	if you	attach	а	continuation	sheet.	

DADT A	DECTRIAL	TREATMENT	DDUCECC	DESCRIPTION

8.01 In accordance with the instructions, provide a residual treatment block flow diagram which describes the treatment process used for residuals identified in question 7.01.

CBI

] Process type FLEXIBLE SLABSTOCK POLYURETHANK Mig ROCKS



[] Mark (X) this box if you attach a continuation sheet.

	In accordance with the which describe each of question 7.02.	instructions, the treatment	provide reside processes used	ual treatment block : d for residuals iden	flow diagram(s) tified in
CBI	Process type	FLEXIBLE	SLARSTOCK	POLYURETHANE	MACA
	~/ _A				
	7				
				,	
		,			
	Mark (X) this box if yo	u attach o co	ntinuation shoo		

8.04 <u>CBI</u>	Describe the typical equipment types for each unit operation identified in your residual treatment block flow diagram(s). If a residual treatment block flow diagram is provided for more than one process type, photocopy this question and complete it separately for each process type.				
[_]	Process type Etchic	LE SUBSTOCK BLYURETHANE MACLINE			
	Unit Operation ID Number (as assigned in questions 8.01, 8.02, or 8.03)	Typical Equipment Type			
	ह.।	SLABSTOCK POLYURETHANK MALL			
	<u> </u>	MIXING HEAD TRUSH			
	Mark (X) this box if you attach	n a continuation sheet.			

8.03 <u>CBI</u>	In accordance with the which describe each of question 7.03.	instructions the treatmen	s, provide res nt processes u	idual treatment b sed for residuals	lock flow diagram(s identified in
[_]	Process type	FLEXIBLE	SUBSIOCK	16LXURET HANE	MACHINE
	N/A				

8.05 CBI	diagram process	(s). If a return type, photo	residual tre copy this q	uestion and co	in your residua low diagram is mplete it sepa r explanation a	provided for ately for ea	more than one ch process
(_)	Process	type	FLEXIB	PLE POLYURE	THANK FOA	m Machine	
	a.	b .	c.	d.	e.	f.	g.
	Stream ID Code	Type of Hazardous Waste	Physical State of Residual ²	Known Compounds ³	Concentra- tions (% or ppm) 4,5,6	Other Expected Compounds	Estimated Concentrations (% or ppm) . 003 PPM
	<u>700</u>		<u> </u>		(E) %PPM	NA	NA
ti	70	NΑ	Gu	CFC-11		<i>N. A</i>	N A
	70	NA	<u> </u>	METHYLENE CALORISE	150 PP N (E)	~ A	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
	JR.	N A	06	FLYS L SYSTEN	uk_	4/-	uk_
8.05	continu	ed below					

8.05 (continued) ¹Use the following codes to designate the type of hazardous waste: I = Ignitable C = Corrosive R = Reactive E = EP toxicT = ToxicH = Acutely hazardous ²Use the following codes to designate the physical state of the residual: GC = Gas (condensible at ambient temperature and pressure) GU = Gas (uncondensible at ambient temperature and pressure) S0 = SolidSY = Sludge or slurry AL = Aqueous liquid OL = Organic liquid IL = Immiscible liquid (specify phases, e.g., 90% water, 10% toluene) 8.05 continued below

[_] Mark (X) this box if you attach a continuation sheet.

		4	
8.05	٠,	(continu	ued)

³For each additive package introduced into a process stream, specify the compounds that are present in each additive package, and the concentration of each component. Assign an additive package number to each additive package and list this number in column d. (Refer to the instructions for further explanation and an example. Refer to the glossary for the definition of additive package.)

	Additive Package Number		Components of Additive Package	Concentrations (% or ppm)
	1	Fume Retartant	TETRALS (2-CHLORGETHYL) CTHYLENE CLIPPESPATE	1.19/kg (A)
	2			
	3		emilia suppliante de l'internative l'article de l'articl	
i i	4			
1.7 1.7 1.8 1.8 1.8 1.8				4-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
7	5			
4	Maria Alai Eallanda	.		
	A = Analytical r		designate how the concentr	ation was determined:
	E = Engineering	judgement/c	alculation	
8.05 c	continued below			
[<u>]</u>] M	ark (X) this box	t if you att	ach a continuation sheet.	
			E.C.	

Ω	.05	(continued)	ì
o		(Contringed)	,

⁵Use the following codes to designate how the concentration was measured:

V = Volume

W = Weight

⁶Specify the analytical test methods used and their detection limits in the table below. Assign a code to each test method used and list those codes in column e.

Code	Method	Detection Limit (± ug/l)
1	ENGINEERING CALCULATION	<u>uk</u>
2		<u> 46 </u>
3		
4		
5		
6		

Process	type	··· FLEXIBO	E POLYURE	THANE S	LAB STO	ck Machi	ne
a.	b.	c.	d.	e.		f. Costs for	g.
Stream ID Code	Waste Description Code	Management Method Code ²	Residual Quantities (kg/yr)	Manag of Resid On-Site	ual (%)	Off-Site Management (per kg)	Changes i Managemen Methods
DOS	13-84	<u>m6</u>	<u>uk</u>	100%		N/A	NA
		Recyclic					
70	<u>B-57</u>		uk_	100%		NA	NA
70_	<u>B-S7</u>	MS (A)	_uk	100%		NA	_ <i>NA</i>
コス	B -84			<u> </u>		NA	NA
		Recycle					
_	e codes provi e codes provi						

WASTE DESCRIPTION CODES

These waste description codes were developed specifically for this survey to supplement the descriptions listed with the RCRA and other waste codes. (These waste description codes are not regulatory definitions.)

WASTE DESCRIPTION CODES FOR HAZARDOUS WASTE DESCRIBED BY A SINGLE RCRA F, K, P, OR U WASTE CODE

A01 Spent solvent (F001-F005, K086)

A02 Other organic liquid (F001-F005, K086)

A03 Still bottom (F001-F005, K086)

A04 Other organic sludge (F001-F005, K086)

A05 Wastewater or aqueous mixture

A06 Contaminated soil or cleanup residue Other F or K waste, exactly as described*

A08 Concentrated off-spec or discarded

"Exactly as described" means that the waste matches the description of the RCRA waste code.

A12

product

A09 Empty containers

A10 Incinerator ash

Solidified treatment residue A11

Other treatment residue (specify in 'Facility Notes")

Other untreated waste (specify in "Facility Notes")

INORGANIC LIQUIDS—Waste that is primarily

inorganic and highly fluid (e.g., aqueous), with

low suspended inorganic solids and low organic content

801 Aqueous waste with low solvents

B02 Aqueous waste with low other toxic organics

B03 Spent acid with metals

B04 Spent acid without metals

B05 Acidic aqueous waste

B06 Caustic solution with metals but no cyanides

B07 Caustic solution with metals and cyanides

B08 Caustic solution with cyanides but no metais

809 Spent caustic

B10 Caustic aqueous waste

B11 Aqueous waste with reactive sulfides

B12 Aqueous waste with other reactives (e.g., explosives)

B13 Other aqueous waste with high dissolved shiins

B14. Other aqueous waste with low dissolved solids

B15 Scrubber water

816 Leachale

B17 Waste liquid mercury

B18 Other inorganic liquid (specify in "Facility Notes")

INORGANIC SLUDGES-Waste that is primarily inorganic, with moderate-to-high water content and low organic content; pumpable.

B19 Lime sludge without metals

B20 Lime sludge with metals/metal hydroxide sludge

Wastewater treatment sludge with toxic organics

822 Other wastewater treatment sludge

B23 Untreated plating sludge without cyanides

B24 Untreated plating studge with cyanides 825 Other sludge with cyanides

B26 Sludge with reactive sulfides

B27 Sludge with other reactives

B28 Degreasing sludge with metal scale or filings

B29 Air pollution control device sludge (e.g., fly ash, wet scrubber studge)

B30 Sediment or lagoon dragout contaminated with organics

Sediment or lagoon dragout contaminated with inorganics only

B32 Drilling mud

B33 Asbestos siurry or siudge

Chloride or other brine sludge **B34**

B35 Other inorganic studge (specify in 'Facility Notes'')

INORGANIC SOLIDS-Waste that is primarily inorganic and solid, with low organic content and low-to-moderate water content; not pumpable.

836 Soil contaminated with organics

Soil contaminated with inorganics only **B37**

B38 Ash, slag, or other residue from incineration of wastes

B39 Other "dry" ash, slag, or thermal residue

840 "Dry" lime or metal hydroxide solids chemically "fixed" 841 "Dry" lime or metal hydroxide solids not

"fixed" Metal scale, filings, or scrap

843 Empty or crushed metal drums or containers

Batteries or battery parts, casings, cores

B45 Spent solid filters or adsorbents **B46** Asbestos solids and debris

847 Metal-cyanide salts/chemicals **B48** Reactive cvanide salts/chemicals

Reactive sulfide salts/chemicals **B49**

B50 Other reactive saits/chemicals **R51** Other metal salts/chemicals

852 Other waste inorganic chemicals 853 Lab packs of old chemicals only

854 Lab packs of debris only

855 Mixed lab packs

B56 Other inorganic solids (specify in 'Facility Notes'')

INORGANIC GASES-Waste that is primarily inorganic with a low organic content and is a gas at atmospheric pressure.

B57 Inorganic gases

ORGANIC LIQUIDS—Waste that is primarily organic and is highly fluid, with low inorganic solids content and low-to-moderate water content.

858 Concentrated solvent-water solution 859 Halogenated (e.g., chlonnated) solvent

B60 Nonhalogenated solvent **B61** Halogenated/nonhalogenated solvent

mixture

B62 Oil-water emulsion or mixture

RAR Waste oil

B64 Concentrated aqueous solution of other organics

Concentrated phenolics

Organic paint, ink, lacquer, or varnish **B66**

B67 Adhesives or expoxies

B68 Paint thinner or petroleum distillates

869 Reactive or polymerizable organic liquid 870

Other organic liquid (specify in "Facility Notes")

ORGANIC SLUDGES—Waste that is primarily organic, with low-to-moderate inorganic solids content and water content; pumpable.

Still bottoms of halogenated (e.g., chlorinated) solvents or other organic liquids

B72 Still bottoms of nonhalogenated solvents or other organic liquids

B73 Oily sludge

Organic paint or ink sludge 874

B75 Reactive or polymerizable organics 876

Resins, tars, or tarry sludge

877 Biological treatment studge

878 Sewage or other untreated biological sludge

B79 Other organic sludge (specify in 'Facility Notes'')

ORGANIC SOLIDS—Waste that is primarily organic and solid, with low-to-moderate inorganic content and water content; not pumpable.

880 Halogenated pesticide solid

BB1 Nonhalogenated pesticide solid

RR2 Solid resins or polymenzed organics

883 Spent carbon

B84 Reactive organic solid

885 Empty fiber or plastic containers

886 Lab packs of old chemicals only

Lab packs of debris only

888 Mixed lab packs

Other halogenated organic solid

Other nonhalogenated organic solid

ORGANIC GASES—Waste that is primarily organic with low-to-moderate inorganic content and is a gas at atmospheric pressure.

B91 Organic gases

8.07 <u>CBI</u> []	process bloc	y special handling instructions for t ck or residual treatment block flow d s for an example.)	
	Stream ID		
	Code	Special Handli	ng Instructions
		R(n) he	
		14~ //	
	: 		
	containing o	ose construction materials that are roor transporting the listed substance,	and those materials that you know
	containing of could cause used to cont		and those materials that you know corrosion (incompatible) if they are e.
8.08 CBI	containing of could cause used to cont	or transporting the listed substance, a dangerous reaction or significant ain or transport the listed substance. Construction	and those materials that you know corrosion (incompatible) if they are e. n Materials
<u>CBI</u>	containing of could cause used to contain Stream	or transporting the listed substance, a dangerous reaction or significant ain or transport the listed substance	and those materials that you know corrosion (incompatible) if they are e. n Materials
<u>CBI</u>	containing of could cause used to contain Stream	or transporting the listed substance, a dangerous reaction or significant ain or transport the listed substance. Construction	and those materials that you know corrosion (incompatible) if they are e. n Materials
CBI	containing of could cause used to contain Stream	or transporting the listed substance, a dangerous reaction or significant ain or transport the listed substance. Construction	and those materials that you know corrosion (incompatible) if they are e. n Materials
CBI	containing of could cause used to contain Stream	or transporting the listed substance, a dangerous reaction or significant ain or transport the listed substance. Construction	and those materials that you know corrosion (incompatible) if they are e. n Materials
CBI	containing of could cause used to contain Stream	or transporting the listed substance, a dangerous reaction or significant ain or transport the listed substance. Construction	and those materials that you know corrosion (incompatible) if they are e. n Materials
<u>CBI</u>	containing of could cause used to contain Stream	or transporting the listed substance, a dangerous reaction or significant ain or transport the listed substance. Construction	and those materials that you know corrosion (incompatible) if they are e. n Materials
<u>CBI</u>	containing of could cause used to contain Stream	or transporting the listed substance, a dangerous reaction or significant ain or transport the listed substance. Construction	and those materials that you know corrosion (incompatible) if they are e. n Materials
<u>CBI</u>	containing of could cause used to contain Stream	or transporting the listed substance, a dangerous reaction or significant ain or transport the listed substance. Construction	and those materials that you know corrosion (incompatible) if they are e.
<u>CBI</u>	containing of could cause used to contain Stream	or transporting the listed substance, a dangerous reaction or significant ain or transport the listed substance. Construction	and those materials that you know corrosion (incompatible) if they are e. n Materials
<u>CBI</u>	containing of could cause used to contain Stream	or transporting the listed substance, a dangerous reaction or significant ain or transport the listed substance. Construction	and those materials that you know corrosion (incompatible) if they are e. n Materials

$\rho I I$	Stream ID Code	Annual Quantity (kg)
R/n/R	<u> </u>	
	The Property and the State of Land and Advantage of Contract of Co	
		
Facility Name		
Address [[_		[[[[[[[[[[[[[
t <u>_</u> t_		[_[_[_[_[_[_[_[_[_[_[_[_[_[_[_[_[_[_
		[[_]
EPA Identificat Hazardous Waste	ion Number (i.e., Facility ID Number)	[_[_[_[_[_[_[_[_[[_
EPA Identificat Hazardous Waste	ion Number (i.e., Facility ID Number)	[_[_[_[_[_[_[_[_[_[_[[

		Quantity Managed	Under Roofed	Type of Contain-	Synthetic Liner	Frequency of Transfer and/or	Stre
1	Pile	per Year (cubic meters)	Structure (Y/N)	ment Provided ¹	$\frac{\text{Base}}{(Y/N)^2}$	Handling Operations ³	ID Cod
	1	(cubic inecess)		1101144		<u> </u>	
	1	400-4-00-0					
	2						
	3						
	4						
	5						
				• • • • • • • • • •		· · · · · · · · · · · · · · · · · · ·	
	No se the	following codes	to designate		f containmen	nt provided:	
	Nose the = Com	following codes	to designate		f containmen	nt provided:	
C P1 P2	No se the = Com con 1 = Par	following codes plete (includes tainment) tial-1 (includes tial-2 (includes	to designate	e the type ontainment a	f containmen	nt provided:	
C P1 P2 N	No se the = Com con 1 = Par 2 = Par = Non	following codes plete (includes tainment) tial-1 (includes tial-2 (includes	to designate both dike co just dike just under	e the type ontainment acontainment)	f containments nd undergrout hate) contai	nt provided:	
C P1 P2 N 2 Wa c l	No se the = Com con 1 = Par 2 = Par = Non aste malay lay	following codes plete (includes tainment) tial-1 (includes tial-2 (includes e y lie directly of er following codes	to designate both dike co just dike of just under	e the type on tainment a containment) ground (leace	f containment and underground thate) contains	nt provided: ind (leachate) inment) may be covered	with a
C P1 P2 N 2 Wa cl	No se the Com con Par Par Non sete ma lay lay se the peration Dail Week Mont	following codes plete (includes tainment) tial-1 (includes tial-2 (includes e y lie directly o er following codes ns: y ly	to designate both dike considerate in the syntheto designate	e the type of containment accontainment) ground (leace etic liner of the containment)	f containment and underground thate) contains	nt provided: ind (leachate) inment) may be covered	with a
C P1 P2 N 2 Wa cl	No se the Com con Par Par Non sete ma lay lay se the peration Dail Week Mont	following codes plete (includes tainment) tial-1 (includes tial-2 (includes e y lie directly of er following codes ns:	to designate both dike considerate in the syntheto designate	e the type of containment accontainment) ground (leace etic liner of the containment)	f containment and underground thate) contains	nt provided: ind (leachate) inment) may be covered	with a
C P1 P2 N 2 Wa cl	No se the Com con Par Par Non sete ma lay lay se the peration Dail Week Mont	following codes plete (includes tainment) tial-1 (includes tial-2 (includes e y lie directly o er following codes ns: y ly	to designate both dike considerate in the syntheto designate	e the type of containment accontainment) ground (leace etic liner of the containment)	f containment and underground thate) contains	nt provided: ind (leachate) inment) may be covered	with

B.10 /	Identification Permit Numbers Listor your facility.	st any applicable identificat	ion or permit number
N/R	EPA National Pollutant Discharge Els (NPDES) Permit No.(s) (discharges to surface water)	imination System	
	EPA Underground Injection Well (UIC) Permit No.(s)(underground injection of fluids)	· · · · · · · · · · · · · · · · · · ·	
	EPA Point Source Discharge (PSD) Permit No.(s)	· • • • • • • • • • • • • • • • • • • •	
	EPA Hazardous Waste Management Facility Permit No.(s)	· · · · · · · · · · · · · · · · · · ·	
	EPA Hazardous Waste Management Facility Permit No.(s)	· · · · · · · · · · · · · · · · · · ·	
	Facility Permit No.(s)		

Mark (X) this box if you attach a continuation sheet.

tanks that are used on-site to store or treat the residuals identified in your process block or residual treatment block flow diagram(s). CBI Average Part of Length Wastewater Design Quantity Treatof Treatment Tank Type of Stream Capacity per Year Storage Train Covered Containment TD ment Tank (liters) (liters) $(Y/N)^4$ Provided³ Types' (days) (Y/N)Code 2 3 4 5 Indicate if Office of Solid Waste survey has been submitted in lieu of response Yes 1 ¹Indicate "S" for storage or use the codes provided in Exhibit 8-3 (which follows question 8.13) to designate treatment types ²Treatment train from which wastewater is discharged under a NPDES permit or through a sewer system to a publicly owned treatment works ³Use the following codes to designate the type of containment provided: C = Complete (includes both dike containment and underground (leachate) containment) P1 = Partial-1 (includes just dike containment) P2 = Partial-2 (includes just underground (leachate) containment) N = None

On-Site Storage or Treatment in Tanks -- Complete the following table for the five largest (by volume)

21,	Container 1	Design Capacity (liters)	Quantity Stored per Year (liters)	Treat- ment Types	Average Length of Storage (days)	Average Daily Stored Quantity (liters)	Maximum Operational Storage Capacity (liters)	Storage Base Material ²	Stream ID Code
	2								
	4							·	
	5								
	by cir	ccling the ap	propriate res	ponse.	as been submit	••••••	1		
					ded in Exhibi			ment types	
	If residual	is stored,	indicate (Y/N) in parenth	nesis whether	the storage	area is desi	gned and ope	erated to
	If residual collect and	l contain sur	indicate (Y/N face runoff to designate	-		the storage	area is desi	gned and ope	erated to

 $[\ \]$ Mark (X) this box if you attach a continuation sheet.

EXHIBIT 8-3 [REFERS TO QUESTIONS 8.12, 8.13, AND 8.29]

VASTEVATER TREATMENT TYPES

VASTEVATER TREATMENT

Equalization 1WT Equalization

Cyanide oxidation

2VT Alkaline chlorination

3VT Ozone

4VT Electrochemical

5VT Other cyanide oxidation

General oxidation (including disinfection)
6WT Chlorination
7WT Ozonation

/WT Ozonation 8WT UV Radiation 9WT Other general oxidation

Chemical Precipitation¹
10WT Lime
11WT Sodium hydroxide
12WT Soda ash
13WT Sulfide

14WT Other chemical precipitation

Chromium reduction
15WT Sodium bisulfite
16WT Sulfur dioxide
17WT Ferrous sulfate
18WT Other chromium reduction

Complexed metals treatment (other than chemical precipitation by pH adjustment)
19WT Complexed metals treatment

Emulsion breaking
20WT Thermal
21WT Chemical
22WT Other emulsion breaking

Adsorption
23VT Carbon adsorption
24VT Ion exchange
25VT Resin adsorption
26VT Other adsorption

Stripping 27WT Air stripping 28WT Steam stripping 29WT Other stripping

Bvaporation 30WT Thermal

31WT Solar 32WT Vapor recompression 33WT Other evaporation

Filtration
34WT Diatomaceous earth
35WT Sand
36WT Multimedia
37WT Other filtration

Sludge devatering

38WT Gravity thickening
39WT Vacuum filtration
40WT Pressure filtration (belt, plate and frame, or leaf)
41WT Centrifuge
42WT Other sludge dewatering

Air flotation
43WT Dissolved air flotation
44WT Partial aeration
45WT Air dispersion
46WT Other air flotation

Oil skimming
47WT Gravity separation
48WT Coalescing plate separation
49WT Other oil skimming

Other liquid phase separation 50WT Decanting 51WT Other liquid phase separation

Biological treatment
52WT Activated sludge
53WT Fixed film--trickling filter
54WT Fixed film--rotating contactor
55WT Lagoon or basin, aerated
56WT Lagoon, facultative
57WT Anaerobic
58WT Other biological treatment

Other wastewater treatment
59WT Wet air oxidation
60WT Neutralization
61WT Nitrification
62WT Denitrification
63WT Flocculation and/or coagulation
64WT Settling (clarification)
65WT Reverse osmosis
66WT Other wastewater treatment

¹Chemical precipitation is a treatment operation whereby the pH of a waste is adjusted to the range necessary for removal (precipitation) of contaminants. However, if the pH is adjusted solely to achieve a neutral pH, THE OPERATION SHOULD BE CONSIDERED NEUTRALIZATION (60WT).

8.14 CBI	(by capac	ity) boiler:	oilers Com s that are us idual treatme	ed on-site	to bur	ng table for the firn n the residuals iden gram(s)	ve large ntified	est 'in your
	Boiler	Total of Tes.	Boiler Type		Average Boiler Load ² (%)	Average Fuel	t -	Stream ID Code
•	1							
	2			-	-		-	
			***************************************	-			-	
	3			-			_	
	4						_	
	5							
	by	circling the	appropriate	response.	-	been submitted in 1		•
	Yes	• • • • • • • • • • •	•••••	• • • • • • • • • •	• • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • •	1
	No	• • • • • • • • • • • •	• • • • • • • • • • • • •		• • • • • •	• • • • • • • • • • • • • • • • • • • •		2
	F = Fire W = Wate	tube	des to design	nate boiler	type:			
	² Designate	e the averag	e boiler load	d when firi	ng res	idual (percent of ca	pacity)	
	³ Designato	e the averag	e fuel replac	cement rati	o as a	percentage (heat-in	put bas	is)
				¥ /A-1				
[-]	Mark (X) t	his box if	you attach a	continuati	on shee	et.		

		Boiler Heat Capacity		Primary Boiler
Boiler 7	2	(heat input in kJ/hr	<u>)</u>	Fuel ¹
1			_	
2	P		_	
3				
4	•		_	
			-	***
5			-	
		Solid Waste survey has criate response.	s been submitted i	n lieu of resp
·				
No	•••••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • •	
C = Coal				

	Provide the following information for or residual treatment block flow diag Photocopy this question and complete	gram(s) that are burned in	on-site boilers
CBI	Boiler number		
·,	Stream ID code(s)		
	RINIR	Residual, as Fired (or residual mixture if residuals are blended)	Boiler Fuel, as Fired (residual(s) plus primary fuel)
	Btu content (J/kg)		
	Average		
	Minimum		
	Total halogen content (% by wt.)		
	Average		
	Maximum		
	Indicate if Office of Solid Was by circling the appropriate res	ponse.	
	No		
· · · · · · · · · · · · · · · · · · ·	Mark (X) this how if you attach a con	tinuation sheet	

Boiler	Stream ID Code	Listed Metal ¹	Total Metal Content (% by weight) Avg. Max
1	<u> </u>		
	Margine control of the Add annual program		
3		·	
			
5			
by cir Yes	cling the appropriate	Waste survey has been sul	
¹ A listed me	tal is either an EP to List (as defined in se	xic metal or a metal that ction 3004(d)(2) of the I	t is included on the

8.18 CBI	Complete the foll on-site to burn t block flow diagra	lowing table for the five largest (by the residuals identified in your pro- tm(s).	y capacity) boilers that are used cess block or residual treatment
[_]	RINIR	Air Pollution	Types of Emissions
	<u>Boiler</u>	Control Device	Data Available
	1		
	2		
	3		
	4		
	5		
		Office of Solid Waste survey has by the appropriate response.	een submitted in lieu of response
	Yes		
	No		2
	S = Scrubber (in E = Electrostati	ng codes to designate the air pollut sclude type of scrubber in parenthes c precipitator fy)	is)
	Company (Special	-3/	

	'Stack Parameters Provide the following information for each of the (by capacity) boilers that are used on-site to burn the residuals ide process block or residual treatment block flow diagram(s). Photocopy and complete it separately for each boiler.	entified in vour
[_]	Boiler number	
P/	Stack height	m
1/p	Stack inner diameter (at outlet)	m
1	Exhaust temperature	•c
	Vertical or horizontal stack	(V or H)
	Annual emissions for the listed substance	kg/yr
	Height of attached or adjacent building	m
	Width of attached or adjacent building	m
	Building cross-sectional area	m ²
;	Emission exit velocity	
	Average emission rate of exit stream	kg/min
	Maximum emission rate of exit stream	kg/min
	Average duration of maximum emission rate of exit stream .	min
	Frequency of maximum emission rate of exit stream	times/year
٠	Indicate if Office of Solid Waste survey has been submitted in by circling the appropriate response.	lieu of response
	Yes	1
	No	2
		
[⁻ 1	Mark (X) this box if you attach a continuation sheet.	

14	R Incinerator	Incinerator Type	Primary Incinerator Fuel ²	Average Fuel Replacement Ratio ³	Stream ID Code
	1				
	2				
	3				
		f Office of Solid We the appropriate in	Waste survey has been response.	en submitted in lie	u of respo
	Yes	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • •
	No	• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • •
	¹ Use the following	ng codes to designa	ate the incinerator	type:	
	1I = Liquid inje		6I = Multiple h		
	2I = Rotary or 1 3I = Rotary kili	n with a liquid'	7I = Fluidized 8I = Infrared		
	injection u 4I = Two stage	ınit	9I = Fume/vapor 10I = Pyrolytic		
	5I = Fixed heart	th	11I = Other (spe		
	² Use the following	ng codes to designa	ite the primary inci	nerator fuel:	
	A = Oil		D = Wood		
	B = Gas C = Coal		E = Other (speci	fy)	
	³ Designate the pecapacity)	ercentage of auxili	ary fuel used when	firing residual (pe	ercent of

/n/a			Incinerator Heat Capacity (heat input in		Feed _.
Incinerator		-	kJ/hr)	-	Type
1		_		-	· ·
2		_		-	
3		_		_	
	te if Office o		Waste survey has be response.	een submitted	in lieu of respo
Yes	• • • • • • • • • • • • • • • • • • • •	• • • • • • •		•••••	
No	• • • • • • • • • • • •	• • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • • • • • •
B = Atomizin C = Solid-b D = Solid-c	atch charge ontinuous char				
C = Solid-b					
C = Solid-b					
C = Solid-b					

8.22 CBI	Describe the (by capacity) your process l	incinerator	s that are us	sed on-site	to burn the m	esiduals id	argest entified in	
[_]	RINIR	Combustion Chamber Temperature (°C)		Location of Temperature Monitor		Residence Time In Combustion Chamber (seconds)		
	Incinerator	Primary	Secondary	Primary	Secondary	Primary	Secondary	
	1							
	2							
	3							
	by circl	if Office ing the app	ropriate resp	onse.	s been submit			
	No	• • • • • • • • • • • • • • • • • • • •	••••••	•••••	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	2	
(<u> </u>	Incinerator	k flow diag	Air Po	llution Device		Types Emission Avail	s Data	
	2							
	3							
	Indicate if Office of Solid Waste survey has been submitted in lieu of response by circling the appropriate response.							
	Yes	• • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • •	1	
	No	• • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • •	2	
	¹ Use the follow S = Scrubber (E = Electrosta	wing codes ((include typatic precipi	to designate be of scrubbe	the air poll				
[<u>]</u>]	E = Electrosta 0 = Other (spa	ecify)			eet.			

<u>CBI</u>	Stack Parameters Provide the following information on stack para three largest (by capacity) incinerators that are used on-site to be identified in your process block or residual treatment block flow de Photocopy this question and complete it separately for each inciner	urn the residuals iagram(s).					
[_]	Incinerator number	9					
÷	Stack height	m					
	Stack inner diameter (at outlet)	m					
•	Exhaust temperature	•c					
	Vertical or horizontal stack	(V or H)					
	Annual emissions for the listed substance	kg/yr					
	Height of attached or adjacent building	m					
	Width of attached or adjacent building	m					
	Building cross-sectional area	m ²					
	Emission exit velocity						
	Average emission rate of exit stream	kg/min					
	Maximum emission rate of exit stream	kg/min					
	Average duration of maximum emission rate of exit stream .	min					
	Frequency of maximum emission rate of exit stream	times/year					
	Indicate if Office of Solid Waste survey has been submitted in lieu of response by circling the appropriate response.						
	Yes	1					
	No	2					
[_]	Mark (X) this box if you attach a continuation sheet.						

25 Provide the following information on the capacity) incinerators that are used or process block or residual treatment bloand complete it separately for each incomplete.	n-site to burn the residuals ock flow diagram(s). Photoco	identified in you
] Incinerator number		
Stream ID code(s)		
RINIR	Residual, as Fired (or residual mixture if residuals are blended)	Incinerator Fuel as Fired (residual(s) plus primary fuel)
Btu content (J/kg)		
Average		
Minimum		
Feed rate (kg/hr)		
Feed rate (J/hr)(kg/hr x J/kg)		
Total halogen content (% by weight)		
Average		
Maximum		
Total ash content (% by weight)		
Average		
Maximum		
Total water content (% by weight)		
Average		
Maximum	·	
Indicate if Office of Solid Waste by circling the appropriate respo		n lieu of response
Yes	•••••	1
No	•••••	2
] Mark (X) this box if you attach a conti	nuation sheet.	

R/w/p Incinerator	Stream ID Code	Listed Metal ¹	Total Metal Content (% by weight) Avg. Max.
1		<u>netal</u>	<u>Avg.</u> <u>Max.</u>
2			-
	Wheeler company and the second	· · · · · · · · · · · · · · · · · · ·	
2			
3	***************************************		
			
by circling	f Office of Solid Wast g the appropriate resp	onse.	
by circling	g the appropriate resp	onse.	• • • • • • • • • • • • • • • • • • • •
by circling Yes	g the appropriate resp	onse.	• • • • • • • • • • • • • • • • • • • •
by circling Yes No A listed metal in	g the appropriate resp	metal or a metal that	is included on the
Yes No A listed metal in California List	g the appropriate resp	metal or a metal that	is included on the

8.27 CBI	On-Site Storage, Treatment or Disposal in a Land Treatment Site Complete the following table for each on-site land treatment site that is used to store, treat, or dispose of the residuals identified in your process block or residual treatment block flow diagram(s).
[⁻]	Total area actively used for land treatment m ²
''	Average slope of site (degree incline)
	Surface water runoff management 1
	Indicate if Office of Solid Waste survey has been submitted in lieu of response by circling the appropriate response.
INIR	Yes 1
1. 1	No 2
	¹ Use the following codes to describe the management practices for surface water runoff:
	A = Collection prior to treatment B = Reapplication to the site C = Canalization prior to treatment D = Other (specify)
[]	Mark (X) this box if you attach a continuation sheet.

Stream ID		Year Land	Methods Used to	Applicatio
Code	7	Treatment Initiated	Apply Residuals ¹	Rate ²
		·		
		ice of Solid Waste surve appropriate response.	ey has been submitted	in lieu of respon
Yes	•••••			• • • • • • • • • • • • • • • • •
No	•••••	• • • • • • • • • • • • • • • • • • • •		
¹ Use the follo land treatmen	owing coo	des to describe the meth	nod(s) used to apply n	residuals to the
Use the follo land treatmen A = Surface s B = Surface s	owing cod it site: spreading	des to describe the meth g or spray irrigation wi g or spray irrigation wi	nod(s) used to apply notes thout plow or disc in	residuals to the
Use the folic land treatmen A = Surface s B = Surface s depth of C = Subsurface	owing coontributes of sites of	des to describe the meth g or spray irrigation wi g or spray irrigation wi cm tion to a depth of	thout plow or disc into the plow or disc income	residuals to the
Use the following the land treatment of the	wing coont site: spreading spreading e inject pecify)	des to describe the method or spray irrigation wing or spray irrigation wing combined to a depth of	nod(s) used to apply and thout plow or disc in the plow or disc incomment.	residuals to the
Use the following the following state of the	wing coont site: spreading spreading e inject pecify)	des to describe the meth g or spray irrigation wi g or spray irrigation wi cm tion to a depth of	nod(s) used to apply and thout plow or disc in the plow or disc incomment.	residuals to the
Use the followard form of the surface of the surface of the subsurface of the subsur	wing coont site: spreading spreading e inject pecify)	des to describe the method or spray irrigation wing or spray irrigation wing combined to a depth of	nod(s) used to apply and thout plow or disc in the plow or disc incomment.	residuals to the
Use the following treatment in the following is a surface of the f	wing cook t site: spreading spreading se inject specify) wing cook	des to describe the method or spray irrigation wing or spray irrigation wing combined to a depth of	thout plow or disc in the plow or disc income cm	residuals to the
Use the following treatment in the following is a surface of the f	wing cook t site: spreading spreading se inject specify) wing cook	des to describe the method or spray irrigation wing or spray irrigation wing combined to a depth of	thout plow or disc in the plow or disc income cm	residuals to the
Use the following treatment in the following is a surface of the f	wing cook t site: spreading spreading se inject specify) wing cook	des to describe the method or spray irrigation wing or spray irrigation wing combined to a depth of	thout plow or disc in the plow or disc income cm	residuals to the
Use the following treatment in the following is a surface of the f	wing cook t site: spreading spreading se inject specify) wing cook	des to describe the method or spray irrigation wing or spray irrigation wing combined to a depth of	thout plow or disc in the plow or disc income cm	residuals to the
Use the following treatment in the following is a surface of the f	wing cook t site: spreading spreading se inject specify) wing cook	des to describe the method or spray irrigation wing or spray irrigation wing combined to a depth of	thout plow or disc in the plow or disc income cm	residuals to the
Use the following treatment in the following is a surface of the f	wing cook t site: spreading spreading se inject specify) wing cook	des to describe the method or spray irrigation wing or spray irrigation wing combined to a depth of	thout plow or disc in the plow or disc income cm	residuals to the
Use the following treatment in the following is a surface of the f	wing cook t site: spreading spreading se inject specify) wing cook	des to describe the method or spray irrigation wing or spray irrigation wing combined to a depth of	thout plow or disc in the plow or disc income cm	residuals to the

w	·		1	
		٠	•	

	m . 1	Specify Storage, Disposal or	Average		IC LINER		LINER	COLLE	CHATE CCTION STEM	
Impound- ment	Total Capacity (liters)	Treatment Type if Applicable ¹	Residency Time (days) ²	No. of <u>Liners</u>	Thick- ness (cm) ³	No. of Liners	Thickness (cm)	Installed (Y/N)	Leachate Collected (Y/N)	Stream ID Cod
1					**************************************					
2										
3							· 			
4										
5										
		ffice of Solid		ey has b	een submi	tted in	lieu of res	ponse		
by Ye:	circling th		response.		• • • • • • • •		•••••	1		
No Indicate 8.13) to Indicate parenthe	e "S" for so designate	he appropriate torage, "D" for treatment type ency time for the following	or disposal,	or use	the codes	provide	d in Exhibi	1 2 t 8-3 (which	ı, indicate	in
No Indicate 8.13) to Indicate parenthe	e "S" for so designate e the reside esis using the contilects on the contilect on the contilects on the contilects on th	he appropriate torage, "D" for treatment type ency time for the following	or disposal, be the surface codes the f	or use impound	the codes	provide	d in Exhibi	1 2 t 8-3 (which	ı, indicate	in

8.30 CBI	cells that	sposal in are used diagram(s	on-site to	ells Comp dispose of	lete the fo the residua	ollowing tab als identifi	le for the ed in your	five large process bl	st (by volum ock or resid	e) landfil ual treatm	1 en
[_]	Landfill Cell	Quantity per year (kg)		E LAYER Thickness	No. of	LINER Thickness	No. of	NTHETIC LIN	Thickness	Stream ID	.
	CELL	<u>(kg)</u>	(1/N)	(cm)	Liners	(cm) ¹	Liners	Material	(cm) ¹	Code	
	1								·····		
70	2		<u> </u>					•			
2	3	•									
7	4							-			
,	5						-				
	Indi by c	cate if Of	fice of Sol e appropria	id Waste sur	rvey has be	een submitte	d in lieu	of response			
	Yes	• • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	•••••	• • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • •	1			
	No .	•••••	• • • • • • • • • • • • • • • • • • • •	•••••	• • • • • • • • • • •	• • • • • • • • • •	• • • • • • • • • •	2			
				~~~~~~							

[_] Mark (X) this box if you attach a continuation sheet.

¹Indicate the thickness of each liner

8.31	State	the total	area acti	vely used on-	site for you	r landfill.	• •	1 .
CBI								<b>6</b>
[_]	Total	area activo	ely used	• • • • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		m²
RIN	UR	Indicate is by circling	f Office g	of Solid Wast ropriate resp	e survey has	been submitt	ed in lieu o	of response
•	•	Yes	• • • • • • • •	• • • • • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	•••••	1
		No	• • • • • • • •	• • • • • • • • • • • •	• • • • • • • • • •	• • • • • • • • • • • • •	•••••	2
8.32 <u>CBI</u> [_]	conta					landfill cell or residual	treatment bl	lock flow
<u>e</u> \	, le		WO	RKING	CAP DE	SIGN		COLLECTION STEM
' Įr	La	andfill Cell		OVER Thickness (cm)	CLAY I Installed (Y/N)		Installed (Y/N)	Leachate Collected (Y/N)
		2						
		3				4150-4101-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		
		4	**************************************					
		5						
				of Solid Wast ropriate resp		been submitt	ed in lieu o	f response
		Yes		• • • • • • • • • • • • •	• • • • • • • • • • •	• • • • • • • • • • • • •	• • • • • • • • • • • •	1
		No						
	¹ Use ( A = I B = V C = H	the followin	ng codes	to designate				
[_]	Mark (	(X) this box	if you a	ittach a cont	inuation she	et.		

8.33	largest (by volume)	injection wells	Complete the following table that are used on-site to dispose	of the residuals
<u>ĊBI</u>		rocess block or	residual treatment block flow di	agram(s).
[_]	Well Well	Well Type ¹	Quantity Disposed (liters) ²	Stream ID Code
	1			
	2			
	3			
	4			
	5			
	by circling the	e appropriate res	ste survey has been submitted in sponse.	•
			• • • • • • • • • • • • • • • • • • • •	
	dissolved solids	ose below deepess ose into a format solids ose above all gro	t groundwater with <10,000 mg/l tion containing groundwater with bundwater	
	Mark (X) this box if			

SECTION 9 WORKER EXPOSURE	SECTION	9	WORKER	<b>EXPOSURE</b>
---------------------------	---------	---	--------	-----------------

C	'n	٥r	a l	In	e t	rn	cti	οn	٠:

Questions 9.03-9.25 apply only to those processes and workers involved in manufacturing or processing the listed substance. Do not include workers involved in residual waste treatment unless they are involved in this treatment process on a regular basis (i.e., exclude maintenance workers, construction workers, etc.).

[_]	Mark (X)	this b	ox if	you attach	a	continuation	sheet.

## PART A EMPLOYMENT AND POTENTIAL EXPOSURE PROFILE

9.01 Mark (X) the appropriate column to indicate whether your company maintains records on the following data elements for hourly and salaried workers. Specify for each data element the year in which you began maintaining records and the number of years the records for that data element are maintained. (Refer to the instructions for further explanation and an example.)

_]		Data are Ma:	intained for Salaried	: Year in Which Data Collection	Number of Years Records
	Data Element	Workers	Workers	Began	Are Maintained
	Date of hire	_X	_X	1983	6
	Age at hire	<u> </u>	<u> </u>	1983	<u></u>
	Work history of individual before employment at your facility	N/A	N/A	1983	_6
	Sex	<u> </u>	<u> </u>	1983	<u>~~~~</u>
	Race	<u>×</u>	<u> </u>	1983	6
	Job titles	NA	X	1983	6
	Start date for each job title	NA	X	1983	6
	End date for each job title	NA	<u> </u>	1483	6
	Work area industrial hygien monitoring data	e <u>X</u>	<u> </u>	1988	1
	Personal employee monitorin data	N/A	NA	1988	
	Employee medical history	X	X	1983	6
	Employee smoking history	N/A	N/A_	N/A	NJA
	Accident history	<u> X</u>	X	1987	
	Retirement date	NA	N/A	<u> </u>	N/A
	Termination date	<u> </u>	X	1983	6
	Vital status of retirees	N/A	N/A	<u> </u>	N/A
	Cause of death data	n/A	NA	N/A	N/A

									_	_
[ ]	Mark	(X)	this	box	if	vou	attach	а	continuation	sheet

02 <u>I</u>	in which you engage.	e instructions, complete	1011011116	.010 101 6	ach activity
_]	a.	b.	c.	d.	e.
	Activity	Process Category	Yearly Quantity (kg)	Total Workers	Total Worker-Hou
	Manufacture of the listed substance	Enclosed			4
		Controlled Release			***
		0pen			
	On-site use as	Enclosed			
	reactant	Controlled Release	1,470,188	8	4.097
		0pen			
	On-site use as	Enclosed			
	., nonreactant	Controlled Release			
		0pen			
	On-site preparation of products	Enclosed			
		Controlled Release			
		0pen			
				-	

Labor Category	Descriptive Job Title
A	Supervisor
В	SET UP REWIND
c	MACHINE OPERATOR / RECORDER
D	CUT off SAW OPERATOR
E	MATERIAL HANDLERS
F	w'house helpers
G	
H	
I	
J	

9.05 ,	may potential additional as	y come in contact with as not shown in the pr	nown in question 9.04 that encount or be exposed to the listed strocess block flow diagram in que complete it separately for each	substance. Add any sestion 7.01 or
[_]	Process type	FLEXIBLE SLA	IBSTOCK POLYURETHANE	MACHINE
	Work Area ID		ription of Work Areas and Worke	
	1		TOAM MACHINE CONTROLS,	POUR HEAD
	2	REwind		
	3	<u>Cur off</u> s	SAW, CUT OFF SAW OF SUPERU	ERATOR + Supervisor
	4	BUN TAKE	off AREA, INATERIACH	Andlers, whouse
	5			NO. 100 P. 100 P
	6			
	7			Service National Control of the Cont
	8			
	9			
	10			197
	#1	aperuisor And Set	UP PERSONEL + MACHINE	OPERATOR
	# 2	TET UP AND Re	•	
	#3	141 OFF SAW OP	ERATOR, SUPERVISOR,	
	#4	MATERIAL HANdle	ers, w'house	
			·	
[_]	Mark (X) this	ox if you attach a con	ntinuation sheet.	·· <del>·</del>

9.04	In accordance with the instruction indicate associated work areas.	ons, provide you	r process block flow	diagram(s) and
<u>CBI</u>				
[_]	Process type FLEXIBLE	SLABSTOCK	POLYURETHANE	MACLINE
				, , , , , , , , , , , , , , , , , , , ,
2				
,				
ı.≱ı	Mark (X) this box if you attach a	continuation sh	eet.	

	APPENDIX	I:	List	of	Continuat	ion	Sheets
--	----------	----	------	----	-----------	-----	--------

Attach continuation sheets for sections of this form and optional information after this page. In column 1, clearly identify the continuation sheet by listing the question number to which it relates. In column 2, enter the inclusive page numbers of the continuation sheet for each question number.

-
****

	were ineffective in preventing the release from reaching the environment.
	Release No
	·
1	Describe all repairs and/or preventive measures (management practices, operati changes, etc.) made to equipment or operations as a result of the release.
3	Release No
_	
•	
-	
-	
I	Describe additional preventive measures that will be taken to minimize the possibilities of recurrence.
	Release No
-	
-	
-	
_	

10.30	Specify the number of personal injuries or casualties resulting from the release.
NA	Release No
•	Number of injuries to facility employees
	Number of injuries to general population
•	Number of deaths to facility employees
	Number of deaths to general population
10.31	Indicate who conducted cleanup activities, and the dates over which the cleanup was performed.
	Release No
	Name [_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]
	Address [_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]
n/A	[_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]
	[_]_] [_]]]][_]]]]]]]]]
	Telephone Number
	Date Cleanup Initiated
	Date Cleanup Completed (or expected) []][]] Mo.   Year
10.32	Briefly describe the release prevention practices and policies (backup systems, containment systems, training programs, etc.) in place at the facility at the time the release occurred.
<i>/</i>	Release No
$P \mid P$	
•	
[_]	Mark (X) this box if you attach a continuation sheet.

.28 (continu	,					
c. <u>Loc</u> a	1					
Agen	су	[_]_]_]		]_]_]_]		]_]_]_]
Offi	ce	[_]_]_]		]_]_]]]		]111
Cont	act Person	[_]_]_]		1_1_1_1		]_]_]_]
Addr	ess []_	_1_1_1_1_1_1		1_1_1_1	111_	]_]_]_]
4.				Street		
4/8	[_]	_1_1_1_1_1	_1_1_1_1_1_1	]]]_]]]]	111_	]_]_]_]
						[]
Tele	phone Numbe	r	[]	_]_]_]-	[_]_]_]-	.[_][_]
Date	Notified .	• • • • • • • • • • • • • • • • • • • •				
						Day Year
111116						1 1 21111/
within t	of the pro	ty was notifie	d below, indicated of, or evacuate	whether the decause of	he populati	on living
within t who noti and time	of the pro hat proximi fied the po of day the	ximities liste ty was notifie pulation, the evacuation be	ed below, indicate ed of, or evacuate number of people	whether the decause of the decause o	he populati of the rele if any, an	on living ease. Speci
within t who noti and time	of the pro hat proximi fied the po of day the	ximities liste ty was notifie pulation, the evacuation be	d below, indicate d of, or evacuate number of people	whether the decause of the decause o	he populati of the rele if any, an	on living ease. Speci
within t who noti and time	of the prohat proximi fied the po of day the No  Noti oy to Rele	ximities liste ty was notifie pulation, the evacuation be	ed below, indicate of of, or evacuate number of people of gan.	whether the decause of the decause o	he population the release if any, and the lease if any any any any any and the lease if any any any any and the lease if any any and the lease if any any any any any and the lease if any any any any any and any	on living ease. Specied the date  Date and Time of Da Evacuation
within to who noting and time  Release  Proximit	of the prohat proximi fied the po of day the No  Noti oy to Rele	ximities liste ty was notifie pulation, the evacuation be fied f ase Notifying	d below, indicate of of, or evacuate number of people of gan.  Notifying Person's	whether the decause of the decause o	he population the release if any, and the lease if any any any any any and the lease if any any any any and the lease if any any and the lease if any any any any any and the lease if any any any any any and any	on living ease. Specied the date  Date and Time of Da Evacuation
within to who noting and time.  Release  Proximit the Release	of the prohat proximi fied the po of day the No  Noti oy to Rele	ximities liste ty was notifie pulation, the evacuation be fied f ase Notifying	d below, indicate of of, or evacuate number of people of gan.  Notifying Person's	whether the decause of the decause o	he population the release if any, and the lease if any any any any any and the lease if any any any any and the lease if any any and the lease if any any any any any and the lease if any any any any any and any	on living ease. Specied the date  Date and Time of Da Evacuation
within to who noting and time.  Release  Proximit the Release  1/4 mile	of the prohat proximi fied the po of day the No  Noti oy to Rele	ximities liste ty was notifie pulation, the evacuation be fied f ase Notifying	d below, indicate d of, or evacuate number of people gan.  Notifying Person's	whether the decause of the decause o	he population the release if any, and the lease if any any any any any and the lease if any any any any and the lease if any any and the lease if any any any any any and the lease if any any any any any and any	on living ease. Specied the date  Date and Time of Da Evacuation
within to who notice and time.  Release  Proximite the Release  1/4 mile.  1/2 mile.	of the prohat proximi fied the po of day the No  Noti oy to Release (Y/	ximities liste ty was notifie pulation, the evacuation be fied f ase Notifying	d below, indicate d of, or evacuate number of people gan.  Notifying Person's	whether the decause of the decause o	he population the release if any, and the lease if any and the lease if the lease is the lease if the lease is the lease i	on living case. Specied the date  Date and Time of Da Evacuation
within to who notical and time.  Release  Proximit the Release  1/4 mile  1/2 mile  1 mile  Other	of the prohat proximi fied the po of day the No  Noti oy to Release (Y/	ximities liste ty was notifie pulation, the evacuation be fied f ase Notifying	d below, indicate d of, or evacuate number of people gan.  Notifying Person's	whether the decause of the decause o	he population the release if any, and the lease if any and the lease if the lease is the lease if the lease is the lease i	on living ease. Specied the date  Date and Time of Da Evacuation
within to who notical and time.  Release  Proximit the Release  1/4 mile  1/2 mile  1 mile  Other	of the prohat proximi fied the po of day the No  Noti oy to Release (Y/	ximities liste ty was notifie pulation, the evacuation be fied f ase Notifying	d below, indicate d of, or evacuate number of people gan.  Notifying Person's	whether the decause of the decause o	he population the release if any, and the lease if any and the lease if the lease is the lease if the lease is the lease i	on living ease. Specied the date  Date and Time of Da Evacuation
within to who notical and time.  Release  Proximit the Release  1/4 mile  1/2 mile  1 mile  Other	of the prohat proximi fied the po of day the No  Noti oy to Release (Y/	ximities liste ty was notifie pulation, the evacuation be fied f ase Notifying	d below, indicate d of, or evacuate number of people gan.  Notifying Person's	whether the decause of the decause o	he population the release if any, and the lease if any and the lease if the lease is the lease if the lease is the lease i	on living ease. Specied the date  Date and Time of Da Evacuation

		and the second s	•
10.28	Spe	ecify which authorities were notified of the release.	,
	Rel	lease No	
	a.	<u>Federal</u>	
		Agency [_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]	<u>_</u> ]
		Office [_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]	<u>_</u> 1
		Contact Person [_]_]_]_]_]_]_]_]_]_]_]]]]]]]	_]
w/f	1	Address [_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]	_]
Polit	•	Street	
		[_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]	_1
		crty	_,
		lJ Sta	te
		Telephone Number [_]_]_]-[_]_]-[_]]]-[_]]]	<u>_</u> ]
		Date Notified [_]_] [_]_] [_]_] [_]_] [_]_] [_]_]	<u></u> 1
		Time Notified	
	ь.		, biii
	D.	State	_,
		Agency [_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]]]]]]]]	_'. ',
		·—·—·—·—·—·—·—·—·—·—·—·—·—·—·—·—·—·	_, _,
		Contact Person []]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]]	一, 一,
		Address [_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]_]	,
			<b>–</b> ,
		'''''''''''''	'
		[] Sta	]
		Telephone Number [_]_]_]-[_]_]-[_]_]]	
		Date Notified	_' _ ₁
		Mo. Day Year	r,
		Time Notified [_]_]_]_] am	/pm
10.28	con	ntinued below	
	Mark	c (X) this box if you attach a continuation sheet.	
<b>—</b>		• • • • • • • • • • • • • • • • • • • •	

10.27	Circle all appropriate responses relating to the cause and the effects of the release.	
,	Release No	
4	Cause of Release	
2	Equipment failure	1
للد	Operator error	2
	Bypass condition	3
	Upset condition	4
	Fire	5
	Unknown	6
	Other (specify)	7
	Results of Release	
i	Spill	1
<del>"</del>	Vapor release	2
	Explosion	3
	Fire	4
	Other (specify)	5
Ş.		

Release No							
A			Migration Beyond	Quantity			
Media	Quantity (kg)	Method of Release	Boundaries <u>(Y/N)</u>	Migrated (kg)			
Land							
Air							
Groundwater	•						
Surface water							
		oncentration of the listed	substance at the	e time and			
Release No		• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • •				
Concentration (2	()	• • • • • • • • • • • • • • • • • • •					
A							
	Media Land Air Groundwater Surface water  Specify the physpoint of release Release No Point of release Physical state	Release No.  Quantity (kg)  Land Air  Groundwater  Surface water  Specify the physical state and copoint of release.  Release No.  Point of release  Physical state	Release No.  Quantity Media (kg) Method of Release  Land Air  Groundwater  Surface water  Specify the physical state and concentration of the listed point of release.  Release No.  Point of release  Physical state	Media Quantity Media (kg) Method of Release (Y/N)  Land Air  Groundwater  Surface water  Specify the physical state and concentration of the listed substance at the			

PART	<b>1</b>	NON-	ROUTINE	RELE	ACEC

10.23	Indicate the date and time when the release occurred and when the release ceased of	or
	was stopped. If there were more than six releases, attach a continuation sheet ar	ıd
	list all releases.	

2.	Release	Date Started	Time (am/pm)	Date Stopped	Time (am/pm)
A	1	*			
	2			<del></del>	
	3				
	4				
	5				
	6				

10.24 Specify the weather conditions at the time of each release.

2	
سرا	
7	

Release	Wind Speed (km/hr)	Wind Direction	Humidity (%)	Temperature (°C)	Precipitation (Y/N)
1				44	
2					***
3					
4					
5					
6					

[ ] Mark (X) this box if you attach a continuation she
--------------------------------------------------------

10.22 <u>CBI</u>	Releases to Drinking Water Complete the following table for up to three samples from drinking water wells monitored during the reporting year. The average and maximum concentration refers to the listed substance.						
ı <u> </u>	<u>Vell</u>	Well Depth (m)	Distance from Plant (m) ¹	Average Concentration (mg/l) (± % precision)	Maximum Concentration (mg/l) (± % precision)		
	<u>1</u> _2				,		
	_3						

OS = On-site

[ <u>]</u> ] M	lark (X)	this box i	if you attac	ach a continuation	sheet.
----------------	----------	------------	--------------	--------------------	--------

¹Use the following code to designate if the sample was taken within the facility's boundary:

10.26 CBI	Releases to Soils Complete the following information for up to three random soil core samples that were taken and analyzed for the listed substance during the reporting year. Report the concentrations of the listed substance determined by soil core monitoring studies/tests. Specify the distance from the facility that soil cores were taken, and indicate the soil type and sample depth of the soil cores. (Refer to the glossary for definitions of soil textures given in foo note 2.)						
[_]	Sample	Concentration (upof Listed Substantial ( ± % precision)	nce D	istance from Plant (m) ¹	Soil Textu	Sample re ² Depth (cm)	
2/5							
	3						
	Use the for boundary: OS = On-si	llowing code to de	esignate if th	ne sample was	taken within	the facility's	
	² Use the form A = Sand B = Loamy SC = Sandy D = Loam E = Silty F = Silt	sand H Loam J	designate soil  G = Sandy clay  H = Clay loam  L = Silty clay  J = Sandy clay  C = Silty clay  L = Clay	loam loam			
10.21 <u>CBI</u>	samples of g	Groundwater Co groundwater from m the listed subst substance.	nonitoring wel	ls during the	reporting ve	ear that were	
		Distance from	Well Depth	Aver Concent (mg/	ration 'l)	Maximum Concentration (mg/l)	
7	Sample	Plant (m)	<u>(m)</u>	(± % pre	ecision)	(± % precision)	
	2		<del></del>		<del></del>		
	3						
*******	Use the fol boundary: OS = On-sit	lowing code to de	signate if th	e sample was t	aken within	the facility's	
	Mark (X) this	box if you attac	h a continuat	ion sheet.			

10.19 <u>CBI</u>	Nonpoint Sources Complete the following information for esource. Examples of nonpoint sources include stormwater rur and runoff from product or raw material storage areas or oth the listed substance and may be discharged to surface water discharges. If discharges are to more than one body of water question and complete it separately for each discharge.	noff, waste pi ner sources th Exclude NPD	le runoff; at contain ES or POTW
[_]	Discharge source (stream ID code)	• • • • •	
14/	A		
	Is discharge to a moving or standing body of water? Circle response.	the appropria	te
	Moving body of water	• • • • • • • • • • • • • • • • • • • •	1
	Standing body of water	••••••	2
	Estimated average base flow (moving)	<u> </u>	l/day
	Estimated average volume (standing)		1
	Average volume of discharge from facility		l/day
		<u> </u>	days/year
	Maximum volume of discharge from facility		l/day
			days/year
	Average concentration of listed substance in discharge	1	mg/l or ppm
	Maximum concentration of listed substance in discharge	1	mg/l or ppm
[_]	Mark (X) this box if you attach a continuation sheet.		

PARI D	RELEASE 10 WAIER								
10.17 CBI	National Pollutant Discharge Elimination System (NPDES) Discharges Complete the following information for each body of water NPDES discharges are discharged into. If discharges are to more than one body of water, photocopy this question and complete it separately for each discharge.								
[_]	Discharge source (stream ID code)	•							
_	Is discharge to a moving or standing body of water? Circle the appropriate response.	priate							
1	Moving body of water								
D	Standing body of water	2							
	Estimated average base flow (moving)	1/day							
	Estimated average volume (standing)	1							
	Average volume of discharge from facility	1/day							
		days/year							
	Maximum volume of discharge from facility	1/day							
		days/year							
	Average concentration of listed substance in discharge	mg/l or ppm							
	Maximum concentration of listed substance in discharge	mg/l or ppm							
10.18 CBI	Publicly Owned Treatment Works (POTW) Complete the following information discharges containing the listed substance which are discharged to a facility.	mation for POTW from your							
[_]	Discharge source (stream ID code)	•							
1/2	Average volume of discharge from facility	1/day							
7		days/year							
	Maximum volume of discharge from facility	1/day							
		days/year							
	Average concentration of listed substance in discharge	mg/l or ppm							
	Maximum concentration of listed substance in discharge	mg/l or ppm							
[_]	Mark (X) this box if you attach a continuation sheet.								

120

Vessel Type		Composition of Stored Materials	Throughput (liters per year)	Vessel Filling Rate (gpm)	Vessel Filling Duration (min)	Vessel Inner Diameter (m)	Vessel		Vessel Emission Controls		Vent Diameter (cm)	Control Efficiency (%)	Bas fo Estin
H	NA	80(c)	401,276	70	66	2.03	4.88	<u>%08</u>	Pressure Relief	1/2 10 2/	45.08	98%	
<u>H</u>	WA	80 (c)	401,276	70	46	2.03	4.88	%°/	iressyl <u>kcuef</u>	1/2 102%	5.08	98%	
<u>H</u>	NA	80(c)	401,276	70	_66	2.03	4.88	80%	PRESSULE RELICE	1/2 10 2/4	5.08	99%	
				-								-	. <del></del>
		· <del></del>		-									
									-			•	

CIF = Contact internal floating roof

NCIF = Noncontact internal floating roof

EFR = External floating roof

P = Pressure vessel (indicate pressure rating)

H = Horizontal

U = Underground

MS2 = Shoe-mounted secondary

MS2R = Rim-mounted, secondary

LM1 = Liquid-mounted resilient filled seal, primary

LM2 = Rim-mounted shield

LMW = Weather shield

VM1 = Vapor mounted resilient filled seal, primary

VM2 = Rim-mounted secondary

VMW = Weather shield

³Indicate weight percent of the listed substance. Include the total volatile organic content in parenthesis

⁴Other than floating roofs

⁵Gas/vapor flow rate the emission control device was designed to handle (specify flow rate units)

⁶Use the following codes to designate basis for estimate of control efficiency:

C = Calculations

S = Sampling

10.15	Equipment Leak Detec place, complete the procedures. Photoco type.	following table re	garding tho	se leak det	ection and r	enair
CBI		1				
[_]	Process type		A			
	Equipment Type	Leak Detection  Concentration (ppm or mg/m³)  Measured at  Inches  from Source	Detection	of Leak Detection	Repairs Initiated (days after detection)	Repairs Completed (days after initiated)
			- DC11CC	(per year)	detection	Initiated)
	Pump seals					
	Packed					
	Mechanical					
	Double mechanical					
	Compressor seals					
	Flanges Valves			***************************************		
	Gas					
	Liquid					
	Pressure relief devices (gas or vapor only)					
	Sample connections		,			
*, *	Gas					
	Liquid					
	Open-ended lines					
	Gas					
	Liquid _					
	Use the following co  POVA = Portable orga  FPM = Fixed point mo  O = Other (specify)	des to designate d nic vapor analyzer nitoring	etection de	vice:		
<u> </u>	ark (X) this box if y	ou attach a contin	uation shee	t.		

10.13	(continuéd)			, ,
	² If double mechanical sea greater than the pump st will detect failure of t with a "B" and/or an "S"	uffing box pressure a he seal system, the b	and/or equipped wi	th a sensor (S) that
	³ Conditions existing in t	he valve during norma	al operation	
	⁴ Report all pressure relication control devices	ef devices in service	e, including those	equipped with
	⁵ Lines closed during norm operations	al operation that wou	ıld be used during	maintenance
10.14 CBI	Pressure Relief Devices was pressure relief devices in devices in service are content "None" under column	dentified in 10.13 to ntrolled. If a press	indicate which p	ressure relief
	a. Number of	b. Percent Chemiçal	c.	d. Estimated
	Pressure Relief Devices	<u>in Vessel</u>	Control Device	Control Efficiency ²
	3	11-25%	NONE	100%
		_5%		190%
				-
1	Refer to the table in quest heading entitled "Number of Substance" (e.g., <5%, 5-1	of Components in Serv	d the percent rang ice by Weight Perc	ge given under the cent of Listed
;	The EPA assigns a control with rupture discs under nefficiency of 98 percent for conditions	normal operating cond	itions. The EPA a	ssigns a control
<u> </u>	Mark (X) this box if you at	tach a continuation	sheet.	
				·····

τ	TAAS	C	PHOTTY	EMISSIONS
z	· AAC	U	LUGILIA	* PBT 221 AB2

10.13	Equipment Leaks Complete types listed which are expe- according to the specified the component. Do this for residual treatment block for not exposed to the listed sprocess, give an overall per exposed to the listed substantial	osed to the livelight percent each procest low diagram(stance. It is not better the contract of the contract o	listed suent of the ss type is). Do rule this is time per	ubstance and listed identified not included a batch ryear tha	nd which substance in your e equipme or inter t the pro	are in se passing process b nt types mittently cess type	rvice through lock or that are operated is
[_]	Process type   LEXIB	IE SIARSTAL	LEIVII	esthous	Parcies	Machine	ž
·,	Percentage of time per year type	that the li	sted sub	stance is	exposed	to this p	rocess
		Number		nents in S d Substan			
	Equipment Type Pump seals ¹	Less than 5%	5-10%	11-25%	26-75%	76-99%	Greater than 99%
	Packed	NA	NA	NA	NA	NA	NA
	Mechanical	1	NA	1	NA	NA	NA
	Double mechanical ²	NA	NA	NA	NA	NA	NA
	Compressor seals ¹	NA	WA	NA	NA	NA	NA
	Flanges	NA	NA	NA	rA	NA	NA
	Valves						
	Gas ³	NA	NA	NA	NA	NA	NA
	Liquid	NA	NA	NA	NA	NA	NA
	Pressure relief devices ⁴ (Gas or vapor only)	3	NA	3	NA	NA	NA
	Sample connections						
	Gas	KOP1	NA	NA	NA	NA	NA
	Liquid		WA	NAI	NA	NA	NA
	Open-ended lines ⁵ (e.g., purge, vent)						
	Gas	NO	NA	NA	NA	NA	NA
	Liquid		NA	NA	NA	NA	NA
	¹ List the number of pump an compressors	d compressor	seals,	rather tha	in the num	mber of pu	imps or
10.13	continued on next page						

10.12 <u>CBI</u>	If the listed substance is emitted in particulate form, indicate the particle size distribution for each Point Source ID Code identified in question 10.09. Photocopy this question and complete it separately for each emission point source.						
	W/A						
[_]	Point source ID code						
	Size Range (microns)	Mass Fraction (% $\pm$ % precision)					
	< 1						
	≥ 1 to < 10						
	≥ 10 to < 30						
	≥ 30 to < 50						
	≥ 50 to < 100						
	≥ 100 to < 500						
	≥ 500						
		Total = 100%					

10.11 Stack Parameters -- Identify the stack parameters for each Point Source ID Code identified in question 10.09 by completing the following table.

<u>CBI</u>

Point Source ID Code	Stack Height(m)	Stack Inner Diameter (at outlet) (m)	Exhaust Temperature (°C)	Emission Exit Velocity (m/sec)	Building Height(m)	Building Width(m) ²	Vent Type ³
74	3.67	.99	<u>uk</u>	uk	4.88	18.3	<u>H_</u>
74	3.67 3.67	.51	44	uk?	4.88	78.3	Ħ
フレ	.3.67	.61	YK YK	44	4.88	18.3	H
7V	3.67	.61	44	uk	4.88	18.3	+1
- <del>10</del>	3.67 3.67	<u>.61</u> .61	<u> 46</u> 46	- UK	4.88	18.3	<u>H</u>
<u> </u>	3.67 ( )A(1/2)		<u> 46.</u>	<u>uk</u>	4.88	/8.3	WALL
<u> </u>		1.63		<u>uk</u>	4.88	18.3	WALL
TAA	WALLFAN	1.22	<u>uk</u>	<u>uk</u>	5.49	45,7	FAN
<u> </u>	WALL	1.22	uh.	<u>uk</u>	5,49	45.1	FAM
AAI	WALL	1.22	yk	4k	5.49	45.7	FAN
		······································	· · · · · · · · · · · · · · · · · · ·		<del>, , , , , , , , , , , , , , , , , , , </del>		

¹Height of attached or adjacent building

H = Horizontal

V = Vertical

²Width of attached or adjacent building

³Use the following codes to designate vent type:

[[]_] Mark (X) this box if you attach a continuation sheet.

 $\Box$ 

8

this

рох

if

you

¹Use the following codes to designate physical state at the point of release: G = Gas; V = Vapor; P = Particulate; A = Aerosol; O = Other (specify)

²Frequency of emission at any level of emission

³Duration of emission at any level of emission

 $^{^4}$ Average Emission Factor — Provide estimated ( $\pm$  25 percent) emission factor (kg of emission per kg of production of listed substance)

CBI re	ubstance in terms o esidual treatment b ource. Do not incl	
Pı	cocess type	FLEXIBLE DLAB STOCK BLYYRETHANE PROCKES MACH.
Poi	int Source ID Code	Description of Emission Point Source
	7-R	MIXING HEAD FLUSH
	74	VENT FANS FOR REACTION ZONE
	70	VENT FANS FOR CONVEYOR SYSTEM
**********	7 X	VENT FANS FOR CUT OFF SAW
·	TAA	VENT INNS FOR CHRING AREA
	700	VENT FOR BUCK TANK
		-

10.08 CBI	for each process stream process block or residual	hnologies used to minimize release containing the listed substance as a treatment block flow diagram(s). ly for each process type.	identified in your
[_]	Process type		
	Stream ID Code	Control Technology	Percent Efficiency
[_]	Mark (X) this box if you a	attach a continuation sheet.	

Process type	e			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Process Stream ID	Media	Average Amount of Listed	Number of	Days o
Code	Affected ¹	Substance Released ²	Batches/Year	Yea
-				
		· · · · · · · · · · · · · · · · · · ·		-
		-		d and a
		•	**************************************	
		·		
A = Air B = Land C = Groundwa D = POTW E = Navigabl	ater le waterway igable waterway	signate the media affected:		
² Specify the the following	average amount of ng codes to design	listed substance released ate the units used to measu	to the environm	ent and t
A = kg/day B = kg/batch	1			

uantity discharged to the air .			
uantity discharged to the air .			
		72.83	kg/yr ±. <u>©0</u> /
uantity discharged in wastewate	ers	NA	kg/yr ± <u>WA</u>
uantity managed as other waste reatment, storage, or disposal	in on-site units	4,540	kg/yr ±
		NA	kg/yr <u>+</u> <u>N/A</u>
			·
	·		
ľ	eatment, storage, or disposal antity managed as other waste	mantity managed as other waste in on-site reatment, storage, or disposal units  mantity managed as other waste in off-site reatment, storage, or disposal units  ———————————————————————————————	reatment, storage, or disposal units $4540$ Hantity managed as other waste in off-site

10.02	Specify the exact location of your facility (from central point where profis located) in terms of latitude and longitude or Universal Transverse Med (UTM) coordinates.							
	Latitude	•••••	·	·				
	Longitude	•••••	•					
	UTM coordinates Zone	, Nort	hing, l	Basting				
10.03	If you monitor meteorological con the following information.	ditions in the vici	nity of your fac	cility, provide				
O'A	Average annual precipitation	• • • • • • • • • • • • • • • • • • • •		inches/year				
	Predominant wind direction	· · · · · · · · · · · · · · · · · · ·						
10.04	Indicate the depth to groundwater	below your facilit	у.					
7	Depth to groundwater	••••••		meters				
10.05 CBI	For each on-site activity listed, listed substance to the environment, N, and NA.)	indicate (Y/N/NA) nt. (Refer to the	all routine rele	ases of the a definition of				
[_]	On-Site Activity	En Air	vironmental Rele Water	ease Land				
	Manufacturing	NA	NA	NA				
	Importing		NA					
	Processing			NA NA				
	Otherwise used		NA	NA NA				
	Product or residual storage	<del></del>	N	N				
	Disposal	NA	NΑ	NA				
	Transport	NA	NA	NA				
<u> </u>	fark (X) this box if you attach a c							

## SECTION 10 ENVIRONMENTAL RELEASE

## General Instructions:

Complete Part E (questions 10.23-10.35) for each non-routine release involving the listed substance that occurred during the reporting year. Report on all releases that are equal to or greater than the listed substance's reportable quantity value, RQ, unless the release is federally permitted as defined in 42 U.S.C. 9601, or is specifically excluded under the definition of release as defined in 40 CFR 302.3(22). Reportable quantities are codified in 40 CFR Part 302. If the listed substance is not a hazardous substance under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and, thus, does not have an RQ, then report releases that exceed 2,270 kg. If such a substance however, is designated as a CERCLA hazardous substance, then report those releases that are equal to or greater than the RQ. The facility may have answered these questions or similar questions under the Agency's Accidental Release Information Program and may already have this information readily available. Assign a number to each release and use this number throughout this part to identify the release. Releases over more than a 24-hour period are not single releases, i.e., the release of a chemical substance equal to or greater than an RQ must be reported as a separate release for each 24-hour period the release exceeds the RO.

For questions 10.25-10.35, answer the questions for each release identified in question 10.23. Photocopy these questions and complete them separately for each release.

PART A	GENERAL INFORMATION
10.01	Where is your facility located? Circle all appropriate responses.
CBI	
[_] (	Industrial area)
	Urban area
(	Residential area)(3
(	Agricultural area
(	Rural area
	Adjacent to a park or a recreational area
	Within 1 mile of a navigable waterway 7
	Within 1 mile of a school, university, hospital, or nursing home facility 8
	Within 1 mile of a non-navigable waterway 9
	Other (specify)10

Plant safety specialist  Insurance carrier  OSHA consultant  Other (specify)  9.25 Who is responsible for the medical program at your facility? Circle the appropresponse.  Plant physician  Consulting physician  Plant nurse  Consulting nurse	• • • •	. 2
OSHA consultant Other (specify)  9.25 Who is responsible for the medical program at your facility? Circle the appropressionse.  Plant physician Consulting physician Plant nurse	• • • •	
9.25 Who is responsible for the medical program at your facility? Circle the appropries points.  Plant physician		. 3
9.25 Who is responsible for the medical program at your facility? Circle the appropriate response.  Plant physician		
Plant physician  Consulting physician		. 4
Consulting physician	oria	te
Plant nurse		. 1
		. 2
Conculting nume	• • •	. 3
consulting nurse	• • • •	. 4
Other (specify)		. 5

[_]	Mark	<b>(X)</b>	this	box	if	you	attach	а	continuation	sheet.
-----	------	------------	------	-----	----	-----	--------	---	--------------	--------

Do you have a written medical action plan for responding to routine or emergency exposure to the listed substance?	
Routine exposure	
Yes	1
(No	2
Emergency exposure	
Yes	1
No	2
If yes, where are copies of the plan maintained?	
Routine exposure:	_
Emergency exposure:	_
Do you have a written leak and spill cleanup plan that addresses the listed substance? Circle the appropriate response.	
Yes	1
(No)	2
If yes, where are copies of the plan maintained?	_
Has this plan been coordinated with state or local government response organizations Circle the appropriate response.	?
Yes	1
No	2
Who is responsible for monitoring worker safety at your facility? Circle the appropriate response.	
Plant safety specialist	1
Insurance carrier	2
OSHA consultant	3
Other (specify)	4
Mark (X) this box if you attach a continuation sheet.	_
	exposure to the listed substance?  Routine exposure  Yes

.19 .BI	Describe all of the work eliminate worker exposure authorized workers, mark monitoring practices, proquestion and complete it	to the listed su areas with warnin vide worker train	ubstance (e.g ng signs, insu ning programs	., restrict e ure worker de , etc.). Pho	ntrance only to tection and tocopy this
_1	Process type FCE	 Exirif SLARST	ack Polyue	ethane Wa	chine
	Work area			Poyring	STATION
	RESTRICT ENTRANCE	only, Author	WIZED WOK	LERS, WARA	VING SIGNS
	PROVIDE TRAINING	PROSRANIS			
.20	Indicate (X) how often you leaks or spills of the lis separately for each process	sted substance. ss type and work	Photocopy thiarea.	is question an	nd complete it
	leaks or spills of the lis	sted substance. ss type and work (IBUE SUABSIO	Photocopy this area.  Che Polygref  Pour  1-2 Times	ANE JOAN WG STALION 3-4 Times	Machinic  More Than 4
	leaks or spills of the lisseparately for each process Process type FLEX	sted substance. ss type and work (IBUE SUABSIO	Photocopy this area.  ck Polyure!  Pour	hank loam	Machinic  More Than 4
	leaks or spills of the lisseparately for each process  Process type FLEX  Work area	sted substance. ss type and work (IBUE SUABSIO	Photocopy this area.  ck Polygres  Pour  1-2 Times  Per Day	ANE JOAN WG STALION 3-4 Times	Machinic  More Than 4
	leaks or spills of the lisseparately for each process  Process type FLEX  Work area	Less Than Once Per Day	Photocopy this area.  ck Polygres  Pour  1-2 Times  Per Day	ANE JOAN WG STALION 3-4 Times	Machinic
	leaks or spills of the lisseparately for each process  Process type FLEX  Work area	Less Than Once Per Day	Photocopy this area.  ck Polygres  Pour  1-2 Times  Per Day	ANE JOAN WG STALION 3-4 Times	Machinic  More Than 4
	leaks or spills of the lisseparately for each process  Process type FLEX  Work area  Housekeeping Tasks  Sweeping  Vacuuming  Water flushing of floors	Less Than Once Per Day	Photocopy this area.  ck Polygres  Pour  1-2 Times  Per Day	ANE JOAN WG STALION 3-4 Times	Machiner  More Than 4
	leaks or spills of the lisseparately for each process  Process type FLEX  Work area  Housekeeping Tasks  Sweeping  Vacuuming  Water flushing of floors	Less Than Once Per Day	Photocopy this area.  ck Polygres  Pour  1-2 Times  Per Day	ANE JOAN WG STALION 3-4 Times	Machiner  More Than 4
	leaks or spills of the lisseparately for each process  Process type FLEX  Work area  Housekeeping Tasks  Sweeping  Vacuuming  Water flushing of floors	Less Than Once Per Day	Photocopy this area.  ck Polygres  Pour  1-2 Times  Per Day	ANE JOAN WG STALION 3-4 Times	Machinic More Than 4
	leaks or spills of the lisseparately for each process  Process type FLEX  Work area  Housekeeping Tasks  Sweeping  Vacuuming  Water flushing of floors	Less Than Once Per Day	Photocopy this area.  ck Polygres  Pour  1-2 Times  Per Day	ANE JOAN WG STALION 3-4 Times	Machiner  More Than 4

Clothing and Equipment	Permeation Tests Conduc (Y/N)
Coveralls	N
Bib apron	$\sim$
Gloves	У
Other (specify)	
RUBBER RAW SUITS	Y
SAFIY CLASSES	<u> </u>
SAFTY Sheilds	
•	

[ ] Mark (X) this box if you attach a continuation sheet.

	type	MSA AIR	MASK		
Type of Training		Location of	Length of Training (hrs)	Person Performing Training	Free
E/R	4	B	2	B/c	
b.				•	
Respirator	type	•••••	• • • • • • • • • • • • • • • • • • • •	MSA AIR	MA
Type of Re-training	Number of Workers Re-trained	Location of Re-Training ² l	Length of Re-Training (hrs)	Person Performing Re-Training ³	Pre
E/R	4	В	<b>2</b>	6/c	
C = On-the $D = Other$ 3 Use the fo	(specify)llowing codes	to designate 1	the person who perf	— forms the training	g or
B = Superv C = Forema	industrial hyg: isor			_	
⁴ Use the fo re-trainin	llowing codes	to designate t	he frequency of re	spirator training	or
re-trainin					

	the listed substance, specify the frequency of the maintenance activity, and the person who performs the maintenance activity. Photocopy this question and complete it separately for each respirator type.							
	Respirator type MSA AIR MASK							
,	Respirator Maintenance Activity	Frequency ¹	Person Performing Activity ²					
	Cleaning	A	C					
	Inspection		B					
	Replacement							
	Cartridge/Canister	NA	NA					
	Respirator unit	<u>_</u> A						
	A = Plant industrial hygi B = Supervisor C = Foreman D = Other (specify)	enist	maintenance activity:					

'9 <b>.</b> 15	respira tested,	ers use respirator type, the work at tors used, the averand the type and e it separately for	reas where t erage usage, frequency o	he respirat whether or f the fit t	ors are us not the r	ed, the type espirators w	of ere fit
<u>CBI</u>			•				
[_]	Process	type	FLEXIBLE	SLAB STOC	k Bolyur	ETHANE W	PAChiNE
	Work Area	Respira Type	tor	Average Usage	Fit Tested (Y/N)	Type of Fit Test ²	Frequency of Fit Tests (per year)
		MSA AIR MAG	<u>λ</u>	E		<u>QT</u>	
					-		
	A = Dai B = Vec C = Mor D = Onc E = Oth ² Use the	ekly	frgemy S	PKUS ONC	<u>Y</u>	:	
[_]	Mark (X)	this box if you	attach a con	tinuation s	heet.	_	

).14 CBI	in each work area	conal protective and safety equing in order to reduce or eliminate copy this question and complete	e their exposi	are to the listed
_1		FLEXIBLE SLABSTOCK PE	•	
				W houst
		Equipment Types	Wear or Use (Y/N)	
		Respirators	<u>N</u>	
		Safety goggles/glasses		
		Face shields	<u> </u>	
		Coveralls	<u>~~</u>	
		Bib aprons	~	
		Chemical-resistant gloves	<u> </u>	
		Other (specify)		
		RYBBER RAIN SUITS	<u> </u>	

	Process type FLEXIBLE SLABSTOCK POLYURE	THANE MACHINE
u	ork area	· POURING STATION / W how
	Equipment or Process Modification	Reduction in Worker Exposure Per Year (%)
_	MODED 3 VENT FAN TO POUR MACHINE	<u>4</u> k
-	ADDED 3 VENT FAN TO WhoUSE AREA	u k
_	· · · · · · · · · · · · · · · · · · ·	
-		
į		

ork area  Ingineering Controls  Entilation:	Used	LABSIDG BLyo	CHRESHANE S	MILACHINE
ngineering Controls	Used			JAYINA
entilation:	(Y/N)	Year Installed	Upgraded (Y/N)	Year Upgraded
Local exhaust General dilution Other (specify)	<del></del>	1980	<del></del>	<u> 1989</u> ———
essel emission controls echanical loading or packaging equipment				
her (specify)			-	
	essel emission controls chanical loading or packaging equipment	chanical loading or packaging equipment	chanical loading or packaging equipment	chanical loading or packaging equipment

$\sim$ $\sim$ /.	A					
<u>Te</u>	st Descrip	tion	·	(weekly,	Frequence monthly, y	early, etc.)
 						· · · · · · · · · · · · · · · · · · ·

[_]	Sample Type	Sampling and Analytical Methodology							
	TOT AIR MONITORS	STATIONARY & MOBILE MONITORING EGT							
.10	If you conduct persona specify the following				substance,				
BI	-formal and an army		on equipment typ						
	Equipment Type ¹	Detection Limit ²	Manufacturer	Averaging Time (hr)	Model Number				
	B/C	<u>A</u>	yk	2 he	uk				
	-								
		-							
	Use the following codes to designate personal air monitoring equipment types:								
	<pre>A = Passive dosimeter B = Detector tube C = Charcoal filtration tube with pump D = Other (specify)</pre>								
	Use the following codes to designate ambient air monitoring equipment types:								
	E = Stationary monitors located within work area F = Stationary monitors located within facility G = Stationary monitors located at plant boundary H = Mobile monitoring equipment (specify)								
	I = Other (specify)  2 Use the following codes to designate detection limit units:								
	A = ppm B = Fibers/cubic centi C = Micrograms/cubic m	meter (f/çc)							
		• • • •							

Sample/Test	Work Area ID	Testing Frequency (per year)	Number of Samples (per test)	Who Samples ¹	Analyzed In-House (Y/N)	Number of Years Recor Maintained
Personal breathing zone	IThru Y		8	<u>D</u>	NA	6 MONT
General work area (air)	1 Thru 4			<u>D</u>	NA	6 mont
Wipe samples						***************************************
Adhesive patches						
Blood samples					****	
Urine samples						
Respiratory samples						
Allergy tests						
Other (specify)						
Other (specify)	*					
Other (specify)						
¹ Use the following contact A = Plant industrial B = Insurance carriect C = OSHA consultant D = Other (specify)	l hygienis er	st		monitorin	g samples:	

	FLEXIBLE POLYURETHANE SLA	
Work area	<u>Po</u>	ARING L STATION
Labor Category	8-hour TWA Exposure Level (ppm, mg/m³, other-specify)	15-Minute Peak Exposure Leve (ppm, mg/m ³ , other-specify)
A	<u>uk</u>	<u>u</u> k
B	<u>uk</u>	uk
	uk_	_ uk
D	uk:	uk
<u> </u>	<u>uk</u>	<u>uk</u>
	<u> </u>	<u>uk</u>
	3	
WE HAVE	had Exposure Leuris che	h-1 0 - h
Rec'd The	Proces Che	CREE, DUI HAUR NOT
THE TAKE	resulls.	

9.06 CBI	Complete the following table for each work area identified in question 9.05, and for each labor category at your facility that encompasses workers who may potentially come in contact with or be exposed to the listed substance. Photocopy this question and complete it separately for each process type and work area.								
[_]	Process type FLEXIBLE SLABSTOCK URETHANE FORM MACHINE								
	Work area	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	<u>Foam</u>	POURING (W	house			
	Labor Category	Number of Workers Exposed	Mode of Exposure (e.g., direct skin contact)	Physical State of Listed Substance	Average Length of Exposure Per Day ²	Number of Days per Year Exposed			
	<u>A</u>	3	DIRECT Stin GAT INHALATION	- · /	2.17(D)	236			
	B	4	DIRECT Skin CONT/ INHACATION	94/0L	<b>.</b>	236			
	<u> </u>	3	INHALATION	94	<b>D</b>	236			
	<u>D</u>	3	INHALATION	34	<u>D</u>	236			
	E		INHALATION	<u> 94</u>	D	236			
,	<u> </u>	5	INHALATION	<u>C14</u>	<i>D</i>	<u> 236</u>			
	-								
\$ 1 min	the point of  GC = Gas (or  temper  GU = Gas (or  temper  include  SO = Solid  2 Use the foll  A = 15 minut  B = Greater  exceedir  C = Greater	exposure: condensible at cature and pre- uncondensible cature and pre- les fumes, var lowing codes t	essure)  at ambient  OL = essure;  IL = essure,  oors, etc.)  o designate average le es, but not  E = 0  to but not  OL =  OL	Sludge or sland Aqueous lique organic lique Immiscible land (specify phases 90% water, 100 ength of expose Greater than the exceeding 4 here.	urry id id iquid ses, e.g., 0% toluene) sure per day: 2 hours, but no ours 4 hours, but no	ot			
[_]	Mark (X) this	box; if you a	ttach a continuation s	sheet.					

